SAFETY DATA SHEET



Hyspin AWS 10

Section 1. Identification

GHS product identifier	Hyspin AWS 10
Product code	456610-MY01
SDS no.	456610
Relevant identified uses of the	substance or mixture and uses advised against
Use of the substance/ mixture	Hydraulic fluid / Lubricant For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Manufacturer	
Supplier	Castrol Australia Pty Ltd Level 17, 717 Bourke Street Docklands, Victoria 3008 ABN 87 008 459 407 www.castrol.com.au
	Tel: +61 (03) 9268 4111
EMERGENCY TELEPHONE NUMBER	+61 2801 44558 (or 1800 14 14 74 within Australia)
OTHER PRODUCT INFORMATION	Technical Advice Helpline Number: 1300 557 998

Section 2. Hazard(s) identification

Classification of the substance or mixture

ASPIRATION HAZARD - Category 1

GHS label elements

Hazard pictograms



Signal word	DANGER	
Hazard statements	H304 - May be fatal if swallowed and enters airways.	
Precautionary statements		
Prevention	Not applicable.	
Response	P301 + P310, P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.	
Storage	P405 - Store locked up.	
Disposal	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.	
Supplemental label elements	Not applicable.	
Other hazards which do not result in classification	Defatting to the skin. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.	
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Section 3. Composition and ingredient information

Substance/mixture Mixture

Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

Ingredient name	% (w/w)	CAS number
₱́istillates (petroleum), hydrotreated light paraffinic	≥75 - ≤90	64742-55-8
Distillates (petroleum), hydrotreated heavy paraffinic	≥10 - ≤30	64742-54-7

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Skin contact	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Aspiration hazard if swallowed. Can enter lungs and cause damage. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects. Product can be aspirated on swallowing or following regurgitation of stomach contents, and can cause severe and potentially fatal chemical pneumonitis, which will require urgent treatment. Because of the risk of aspiration, induction of vomiting and gastric lavage should be avoided. Gastric lavage should be undertaken only after endotracheal intubation. Monitor for cardiac dysrhythmias.
	Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.
Specific treatments	No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Section 5. Firefighting measures

Extinguishing media	
Suitable extinguishing media	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.
Unsuitable extinguishing media	Do not use water jet.
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	Combustion products may include the following: carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide)
Special protective actions for fire-fighters	No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
Special protective equipment for fire-fighters	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protectiv	ve equipment and emergency procedures
For non-emergency personnel	Contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.
For emergency responders	Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".
Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and material for conta	ainment and cleaning up
Small spill	Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilt product. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not swallow. Aspiration hazard if swallowed. Can enter lungs and cause damage. Never siphon by mouth. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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Section 7. Handling and storage

Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/ containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
Not suitable	Prolonged exposure to elevated temperature

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits	
Distillates (petroleum), hydrotreated light paraffinic	Safe Work Australia (Australia). [Oil mist, refined mineral] TWA: 5 mg/m ³ 8 hours. Issued/Revised: 5/1995 Form: Mist	
Distillates (petroleum), hydrotreated heavy paraffinic	Safe Work Australia (Australia). [Oil mist, refined mineral] TWA: 5 mg/m ³ 8 hours. Issued/Revised: 5/1995 Form: Mist	

Biological exposure indices

No exposure indices known.

Appropriate engineering controls	All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national
	organisation for standards. Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
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Section 8. Exposure controls and personal protection

•	
Eye/face protection	Safety glasses with side shields.
Skin protection	
Hand protection	Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
Skin protection	 Use of protective clothing is good industrial practice. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
<u>Refer to standards:</u>	Respiratory protection:AS/NZS 1715 and AS/NZS 1716 Gloves:AS/NZS 2161.1 Eye protection:AS/NZS 1336 and AS/NZS 1337

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	Liquid.
Colour	Yellow. [Light]
Odour	Mild
Odour threshold	Not available.
рН	Not applicable.
Melting point	Not available.
Boiling point, initial boiling point, and boiling range	Not available.
Flash point	Closed cup: >140°C (>284°F) [Pensky-Martens]
Evaporation rate	Not available.
	Not applicable. Based on - Physical state
Lower and upper explosion limit/flammability limit	Not available.
Vapour pressure	

Section 9. Physical and chemical properties

		Vapou	ur Press	ure at 20°C	Vap	our pres	sure at 50°C
	Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
	Distillates (petroleum), hydrotreated light paraffinic	<0.08	<0.011	ASTM D 5191			
	Distillates (petroleum), hydrotreated heavy paraffinic	<0.08	<0.011	ASTM D 5191			
Relative vapour density	Not available.				•		
Relative density	Not available.						
Density	<1000 kg/m³ (<1 g/	cm³) at 15٬	°C				
Solubility(ies)							
Media	Result						
water	Not soluble						
Solubility in water	Not available.						
Partition coefficient: n- octanol/water	Not applicable.						
Auto-ignition temperature	Not available.						
Decomposition temperature	Not available.						
Viscosity Kinematic: 10 mm ² /s Kinematic: 2.55 mm				00°C			
Particle characteristics							
Median particle size	Not applicable.						

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame).
Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological eff	ects			
Aspiration hazard				
Name		Result		
Distillates (petroleum), hydrotrea	ated light paraffinic	ASPIRATI	ON HAZARD - Ca	ategory 1
Information on likely routes of exposure	Routes of entry anticip	ated: Dermal, Inhalation, Ey	es.	
Potential acute health effects				
Eye contact	No known significant e	ffects or critical hazards.		
Inhalation	Vapour inhalation under vapour pressure.	er ambient conditions is not i	normally a proble	m due to low
Skin contact	Defatting to the skin. I	May cause skin dryness and	irritation.	
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Section 11. Toxicological information					
Ingestion	Aspiration hazard if swallowed harmful or fatal if liquid is aspirated into lungs.				
Symptoms related to the phy	vsical, chemical and toxicological characteristics				
Eye contact	No specific data.				
Inhalation	No specific data.				
Skin contact	Adverse symptoms may include the following: irritation dryness cracking				
Ingestion	Adverse symptoms may include the following: nausea or vomiting				
Delayed and immediate effe	cts as well as chronic effects from short and long-term exposure				
Eye contact	Potential risk of transient stinging or redness if accidental eye contact occurs.				
Inhalation	Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.				
Skin contact	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis.				
Ingestion	Ingestion of large quantities may cause nausea and diarrhoea.				
General	No known significant effects or critical hazards.				
Carcinogenicity	No known significant effects or critical hazards.				
Mutagenicity	No known significant effects or critical hazards.				
Teratogenicity	No known significant effects or critical hazards.				
Developmental effects	No known significant effects or critical hazards.				
Fertility effects	No known significant effects or critical hazards.				

Section 12. Ecological information

Persistence and degradability

Not expected to be rapidly degradable.

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

Mobility in soil	
Soil/water partition coefficient (Koc)	Not available.
Mobility	Spillages may penetrate the soil causing ground water contamination.
Other ecological information	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

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Section 13. Disposal considerations

Disposal methods	The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Special Precautions for Landfill or Incineration	No additional special precautions identified.

Section 14. Transport information

	ADG	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

Special precautions for user Not available.

Section 15. Regulatory information

Standard for the Uniform Schee	duling of Medicines and	<u>l Poisons</u>		
Not regulated.				
Model Work Health and Safety	Regulations - Schedule	<u>d Substances</u>		
No listed substance				
Montreal Protocol				
Not listed.				
Stockholm Convention on Per	rsistent Organic Polluta	i <u>nts</u>		
Not listed.				
Rotterdam Convention on Price	or Informed Consent (P	<u>IC)</u>		
Not listed.				
International lists				
National inventory				
REACH Status	For the REACH status identified in Section 1.	of this product please cons	ult your company	contact, as
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Section 15. Regulatory information

Australia inventory (AIIC)	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (CSCL)	All components are listed or exempted.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	At least one component is not listed.
Taiwan Chemical Substances Inventory (TCSI)	All components are listed or exempted.
United States inventory (TSCA 8b)	All components are active or exempted.

Section 16. Any other relevant information

<u>History</u>	
Date of printing	8/16/2023
Date of issue/Date of revision	8/16/2023
Date of previous issue	8/15/2023
Version	3.02
Prepared by	Product Stewardship
Key to abbreviations	ADG = Australian Dangerous Goods ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) NOHSC = National Occupational Health and Safety Commission REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006] STEL = Short term exposure limit SUSMP = Standard Uniform Schedule of Medicine and Poisons UN = United Nations TWA = Time weighted average VOC = Volatile Organic Compound SADT = Self-Accelerating Decomposition Temperature Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

Procedure used to derive the classification

Classification	Justification
ASPIRATION HAZARD - Category 1	Calculation method

✓ Indicates information that has changed from previously issued version.

Notice to reader

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Section 16. Any other relevant information

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

SAFETY DATA SHEET



Hyspin AWS 22

Section 1. Identification

GHS product identifier	Hyspin AWS 22
Product code	456614-AU24
SDS no.	456614
Relevant identified uses of the	substance or mixture and uses advised against
Use of the substance/ mixture	Hydraulic fluid. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Manufacturer	
Supplier	Castrol Australia Pty Ltd Level 17, 717 Bourke Street Docklands, Victoria 3008 ABN 87 008 459 407 www.castrol.com.au
	Tel: +61 (03) 9268 4111
	Fax: +61 (03) 9268 3321
EMERGENCY TELEPHONE NUMBER	+61 2801 44558 (or 1800 14 14 74 within Australia)
OTHER PRODUCT INFORMATION	Technical Advice Helpline Number: 1300 557 998

Section 2. Hazard(s) identification

Classification of the substance or mixture	Not classified.
GHS label elements	
Signal word	No signal word.
Hazard statements	No known significant effects or critical hazards.
Precautionary statements	
Prevention	Not applicable.
Response	Not applicable.
Storage	Not applicable.
Disposal	Not applicable.
Supplemental label elements	Not applicable.
Other hazards which do not result in classification	Defatting to the skin. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

Section 3. Composition and ingredient information

Mixture

Substance/mixture

Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

Ingredient name	% (w/w)	CAS number
Base oil - unspecified	≥60 - ≤75	Varies - See Key to abbreviations
Distillates (petroleum), hydrotreated light paraffinic	≥10 - ≤30	64742-55-8

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.	
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms occur.	
Skin contact	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.	
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Get me attention if symptoms occur.	

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms. Indication of immediate medical attention and special treatment needed, if necessary $\mathbf{\overline{r}}$ reatment should in general be symptomatic and directed to relieving any effects. Notes to physician Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes. **Specific treatments** No specific treatment. **Protection of first-aiders** No action shall be taken involving any personal risk or without suitable training.

Section 5. Firefighting measures

Extinguishing media		
Suitable extinguishing media	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.	
Unsuitable extinguishing media	Do not use water jet.	
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst.	

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Section 5. Firefighting measures

Hazardous thermal decomposition products	Combustion products may include the following: carbon dioxide carbon monoxide
Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures		
For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.	
For emergency responders	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".	
Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).	
Methods and material for cont	ainment and cleaning up	
Small spill	Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.	
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.	

Section 7. Handling and storage

Precautions for safe handling Protective measures Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is Advice on general occupational hygiene handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Conditions for safe storage, Store in accordance with local regulations. Store in original container protected including any from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and incompatibilities sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

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Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits		
Base oil - unspecified	Safe Work Australia (Australia). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 5/1995 Form: Mist		
Distillates (petroleum), hydrotreated light paraffinic	Safe Work Australia (Australia). TWA: 5 mg/m ³ 8 hours. Form: Oil mist, mineral TWA: 5 mg/m ³ 8 hours. Issued/Revised: 5/1995 Form: Mist		

All activities involving chemicals should be assessed for their risks to healt controls All activities involving chemicals should be assessed for their risks to healt ensure exposures are adequately controlled. Personal protective equipment only be considered after other forms of control measures (e.g. engineering have been suitably evaluated. Personal protective equipment should confe appropriate standards, be suitable for use, be kept in good condition and p				
	maintained. Your supplier of personal protectiv selection and appropriate standard organisation for standards. Provide exhaust ventilation or othe	e equipment sho ls. For further in	ould be consulted formation contact	for advice on your national
	airborne concentrations below thei The final choice of protective equip important to ensure that all items of	ir respective occ oment will depen	upational exposure d upon a risk asse	e limits. essment. It is
Environmental exposure controls	Emissions from ventilation or work they comply with the requirements cases, fume scrubbers, filters or en equipment will be necessary to rec	of environmenta	al protection legisla fications to the pro	ation. In some
Individual protection measures				
Hygiene measures	Wash hands, forearms and face the eating, smoking and using the lava Appropriate techniques should be Wash contaminated clothing before safety showers are close to the work of the work of the work of the work of the statement of the work of the w	atory and at the e used to remove re reusing. Ensu	end of the working potentially contam ire that eyewash s	period. iinated clothing.
Eye/face protection	Safety glasses with side shields.			
Skin protection				
Hand protection	Wear protective gloves if prolonge resistant gloves. Recommended: gloves depends upon the chemica and the condition of the gloves (ev down after repeated chemical expe protection before they must be disc environments and material handlin developed for each intended applie consultation with the supplier/many working conditions.	Nitrile gloves. T Is being handled ren the best cher osures). Most glo carded and repla og practices vary cation. Gloves sh ufacturer and wit	The correct choice I, the conditions of mically resistant gl oves provide only aced. Because sp , safety procedure hould therefore be th a full assessme	of protective work and use, ove will break a short time of ecific work s should be chosen in
Skin protection	Use of protective clothing is good in Cotton or polyester/cotton overalls superficial contamination that will re- laundered on a regular basis. Whe cleaning up spillages or if there is a and/or impervious chemical suits a Personal protective equipment for being performed and the risks invo- before handling this product.	will only provide not soak through en the risk of ski a risk of splashir and boots will be the body should	e protection agains to the skin. Over n exposure is high ng) then chemical required. be selected based	alls should be n (e.g. when resistant aprons d on the task
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Section 8. Exposure controls and personal protection

•	· ·
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	 In case of insufficient ventilation, wear suitable respiratory equipment. For protection against metal working fluids, respiratory protection that is classified as "resistant to oil" (class R) or oil proof (class P) should be selected where appropriate. Depending on the level of airborne contaminants, an air-purifying, half-mask respirator (with HEPA filter) including disposable (P- or R-series) (for oil mists less than 50mg/m3), or any powered, air-purifying respirator equipped with hood or helmet and HEPA filter (for oil mists less than 125 mg/m3). Where organic vapours are a potential hazard during metalworking operations, a combination particulate and organic vapour filter may be necessary. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
<u>Refer to standards:</u>	Respiratory protection:AS/NZS 1715 and AS/NZS 1716 Gloves:AS/NZS 2161.1 Eye protection:AS/NZS 1336 and AS/NZS 1337

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	Liquid.
Colour	Amber.
Odour	Not available.
Odour threshold	Not available.
рН	Not available.
Melting point	Not available.
Boiling point	Not available.
Flash point	Closed cup: 170°C (338°F) [Pensky-Martens.]
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable. Based on - Physical state
Lower and upper explosive (flammable) limits	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Density	<1000 kg/m³ (<1 g/cm³) at 15°C
Solubility	insoluble in water.
Partition coefficient: n- octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Kinematic: 22 mm²/s (22 cSt) at 40°C Kinematic: 4.25 mm²/s (4.25 cSt) at 100°C

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Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.		
Chemical stability	The product is stable.		
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.		
Conditions to avoid	Avoid all possible sources of ignition (spark or flame).		
Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.		
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.		

Information on toxical arises	facto	
Information on toxicological e Aspiration hazard	ineuts	
		Des 14
Name		Result
Distillates (petroleum), hydrotr	eated light paraffinic	ASPIRATION HAZARD - Category 1
Information on likely routes of exposure	Routes of entry anticipated: Do	ermal, Inhalation.
Potential acute health effects		
Eye contact	No known significant effects o	r critical hazards.
Inhalation	Vapour inhalation under ambie vapour pressure.	ent conditions is not normally a problem due to low
Skin contact	Defatting to the skin. May cau	ise skin dryness and irritation.
Ingestion	No known significant effects o	r critical hazards.
Symptoms related to the phys	sical, chemical and toxicologica	al characteristics
Eye contact	No specific data.	
Inhalation	No specific data.	
Skin contact	Adverse symptoms may includ irritation dryness cracking	de the following:
Ingestion	No specific data.	
Delayed and immediate effect	s as well as chronic effects fro	m short and long-term exposure
Eye contact	Potential risk of transient sting	ing or redness if accidental eye contact occurs.
Inhalation	Overexposure to the inhalatior of the respiratory tract.	n of airborne droplets or aerosols may cause irritation
Skin contact	Prolonged or repeated contact or dermatitis.	t can defat the skin and lead to irritation, cracking and/
Ingestion	Ingestion of large quantities m	ay cause nausea and diarrhoea.
General	No known significant effects o	r critical hazards.
Carcinogenicity	No known significant effects o	r critical hazards.
Mutagenicity	No known significant effects o	r critical hazards.
Teratogenicity	No known significant effects o	r critical hazards.
	No known aignifiaant offaata a	r critical bazarda
Developmental effects	No known significant effects o	r chucai nazaros.

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Section 12. Ecological information

Persistence and degradability

Expected to be biodegradable.

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

<u>Mobility in soil</u>	
Soil/water partition coefficient (Koc)	Not available.
Mobility	Spillages may penetrate the soil causing ground water contamination.
Other ecclerical information	Spille may form a film on water surfaces equaing physical demage to organize

Other ecological information Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methods	The generation of waste should be avoided or minimised wherever possible.
	Significant quantities of waste product residues should not be disposed of via the
	foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of
	this product, solutions and any by-products should at all times comply with the
	requirements of environmental protection and waste disposal legislation and any
	regional local authority requirements. Waste packaging should be recycled.
	Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or
	liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Special Precautions for	No additional special precautions identified.

Landfill or Incineration

Section 14. Transport information

	ADG	IMDG	ΙΑΤΑ		
UN number	Not regulated.	Not regulated.	Not regulated.		
UN proper shipping name	-	-	-		
Transport hazard class(es)	-	-	-		
Packing group	-	-	-		
Environmental hazards	No.	No.	No.		
Additional information	-	-	-		

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Section 14. Transport information

Special precautions for user Not available.

Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons		
Not regulated.		
Model Work Health and Safety	Regulations - Scheduled Substances	
No listed substance		
International lists		
National inventory		
REACH Status	For the REACH status of this product please consult your company contact, as identified in Section 1.	
Australia inventory (AICS)	All components are listed or exempted.	
Canada inventory	All components are listed or exempted.	
China inventory (IECSC)	All components are listed or exempted.	
Japan inventory (ENCS)	Al components are listed or exempted.	
Korea inventory (KECI)	All components are listed or exempted.	
Philippines inventory (PICCS)	All components are listed or exempted.	
Taiwan Chemical Substances Inventory (TCSI)	All components are listed or exempted.	
United States inventory (TSCA 8b)	All components are listed or exempted.	

Section 16. Any other relevant information

23/09/2016			
23/09/2016			
23/12/2015			
1.01			
Product Stewardship			
ATE = Acute Toxicity Es BCF = Bioconcentration GHS = Globally Harmor IATA = International Air IBC = International Ma LogPow = logarithm of t MARPOL = International 1973 as modified by the NOHSC = National Occ STEL = Short term expo SUSMP = Standard Uni UN = United Nations TWA = Time weighted a VOC = Volatile Organic SADT = Self-Acceleratir Varies = may contain or 101316-71-6, 101316-72	stimate Factor hized System of Classificat Transport Association container aritime Dangerous Goods the octanol/water partition of l Convention for the Preve Protocol of 1978. ("Marpo upational Health and Safet osure limit form Schedule of Medicine average Compound ng Decomposition Temper the or more of the following 2-7, 64741-88-4, 64741-89	coefficient ntion of Pollution I" = marine pollut y Commission and Poisons ature 101316-69-2, 10 9-5, 64741-95-3, 6	From Ships, ion) 1316-70-5, 54741-96-4,
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23/09/2016	Format Australia	Language	e ENGLISH
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	23/09/2016 23/12/2015 1.01 Product Stewardship ADG = Australian Dang ATE = Acute Toxicity Es BCF = Bioconcentration GHS = Globally Harmor IATA = International Air IBC = International Air IBC = International Ma LogPow = logarithm of t MARPOL = International 1973 as modified by the NOHSC = National Occ STEL = Short term expo SUSMP = Standard Uni UN = United Nations TWA = Time weighted a VOC = Volatile Organic SADT = Self-Acceleratin Varies = may contain or	23/09/2016 23/12/2015 1.01 Product Stewardship ADG = Australian Dangerous Goods ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classificat IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition of MARPOL = International Convention for the Preve 1973 as modified by the Protocol of 1978. ("Marpo NOHSC = National Occupational Health and Safet STEL = Short term exposure limit SUSMP = Standard Uniform Schedule of Medicine UN = United Nations TWA = Time weighted average VOC = Volatile Organic Compound SADT = Self-Accelerating Decomposition Tempera Varies = may contain one or more of the following 101316-71-6, 101316-72-7, 64741-88-4, 64741-89 Product code 23/09/2016	23/09/2016 23/12/2015 1.01 Product Stewardship ADG = Australian Dangerous Goods ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollut NOHSC = National Occupational Health and Safety Commission STEL = Short term exposure limit SUSMP = Standard Uniform Schedule of Medicine and Poisons UN = United Nations TWA = Time weighted average VOC = Volatile Organic Compound SADT = Self-Accelerating Decomposition Temperature Varies = may contain one or more of the following 101316-69-2, 10 101316-71-6, 101316-72-7, 64741-88-4, 64741-89-5, 64741-95-3, 64741-95-3, 64741-89-5, 64741-95-3, 64741-89-5, 64741-8

Section 16. Any other relevant information

64741-97-5, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-64-9, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1, 74869-22-0, 90669-74-2

Procedure used to derive the classification

Classification	Justification
Not classified.	

Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

SAFETY DATA SHEET



Hyspin AWS 32

Section 1. Identification

GHS product identifier	Hyspin AWS 32
Product code	456615-AU22
SDS no.	456615
Relevant identified uses of the	e substance or mixture and uses advised against
Use of the substance/ mixture	Hydraulic fluid. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Manufacturer	
Supplier	Castrol Australia Pty Ltd Level 17, 717 Bourke Street Docklands, Victoria 3008 ABN 87 008 459 407 www.castrol.com.au
	Tel: +61 (03) 9268 4111
EMERGENCY TELEPHONE NUMBER	+61 2801 44558 (or 1800 14 14 74 within Australia)
OTHER PRODUCT INFORMATION	Technical Advice Helpline Number: 1300 557 998

Section 2. Hazard(s) identification

Classification of the substance or mixture

Not classified.

GHS label elements	
Signal word	No signal word.
Hazard statements	No known significant effects or critical hazards.
Precautionary statements	
Prevention	Not applicable.
Response	Not applicable.
Storage	Not applicable.
Disposal	Not applicable.
Supplemental label elements	Not applicable.
Other hazards which do not result in classification	Defatting to the skin. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

Product nameHyspin AWS 32Version6.02Date of issue8/16/2023

Section 3. Composition and ingredient information

Substance/mixture Mixture

Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

Ingredient name	% (w/w)	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	≥90	64742-54-7

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary mist and measure	Description of	of necessary	y first aid	measures
---	-----------------------	--------------	-------------	----------

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Skin contact	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms. Indication of immediate medical attention and special treatment needed, if necessary Notes to physician Treatment should in general be symptomatic and directed to relieving any effects. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes. **Specific treatments** No specific treatment. **Protection of first-aiders** No action shall be taken involving any personal risk or without suitable training.

Section 5. Firefighting measures

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Extinguishing media	
Suitable extinguishing media	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.
Unsuitable extinguishing media	Do not use water jet.
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	Combustion products may include the following: carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide)
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Section 5. Firefighting measures

Special protective actions for fire-fighters	No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
Special protective equipment for fire-fighters	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures		
For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.	
For emergency responders	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".	
Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).	
Methods and material for containment and cleaning up		
Small spill	Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.	
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.	

Section 7. Handling and storage

Precautions for safe handling

recautions for sale nandling	
Protective measures	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
Not suitable	Prolonged exposure to elevated temperature

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated heavy paraffinic	Safe Work Australia (Australia). [Oil mist, refined mineral] TWA: 5 mg/m ³ 8 hours. Issued/Revised: 5/1995 Form: Mist

Biological exposure indices

No exposure indices known.

Appropriate engineering controls	All activities involving chemicals should be assessed for their risks to ensure exposures are adequately controlled. Personal protective eq only be considered after other forms of control measures (e.g. engin have been suitably evaluated. Personal protective equipment should appropriate standards, be suitable for use, be kept in good condition maintained. Your supplier of personal protective equipment should be consulted selection and appropriate standards. For further information contact organisation for standards. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations below their respective occupational exposur The final choice of protective equipment will depend upon a risk ass important to ensure that all items of personal protective equipment a	uipment should leering controls) d conform to and properly for advice on t your national e relevant re limits. essment. It is
Environmental exposure controls	Emissions from ventilation or work process equipment should be ch they comply with the requirements of environmental protection legisl cases, fume scrubbers, filters or engineering modifications to the pro- equipment will be necessary to reduce emissions to acceptable leve	ation. In some
Individual protection measures		
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical eating, smoking and using the lavatory and at the end of the working Appropriate techniques should be used to remove potentially contan Wash contaminated clothing before reusing. Ensure that eyewash s safety showers are close to the workstation location.	period. ninated clothing.
Eye/face protection	Safety glasses with side shields.	
Skin protection		
Hand protection	Wear protective gloves if prolonged or repeated contact is likely. W resistant gloves. Recommended: Nitrile gloves. The correct choice gloves depends upon the chemicals being handled, the conditions o and the condition of the gloves (even the best chemically resistant g down after repeated chemical exposures). Most gloves provide only protection before they must be discarded and replaced. Because sp environments and material handling practices vary, safety procedure developed for each intended application. Gloves should therefore be consultation with the supplier/manufacturer and with a full assessme working conditions.	e of protective f work and use, love will break a short time of pecific work es should be e chosen in
Skin protection	Use of protective clothing is good industrial practice. Personal protective equipment for the body should be selected base being performed and the risks involved and should be approved by a before handling this product. Cotton or polyester/cotton overalls will only provide protection agains superficial contamination that will not soak through to the skin. Over laundered on a regular basis. When the risk of skin exposure is hig cleaning up spillages or if there is a risk of splashing) then chemical and/or impervious chemical suits and boots will be required.	a specialist st light ralls should be h (e.g. when
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Section 8. Exposure controls and personal protection

Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
Refer to standards:	Respiratory protection:AS/NZS 1715 and AS/NZS 1716 Gloves:AS/NZS 2161.1 Eye protection:AS/NZS 1336 and AS/NZS 1337

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	Liquid.
Colour	Yellow. [Light]
Odour	Not available.
Odour threshold	Not available.
рН	Not applicable.
Melting point	Not available.
Boiling point, initial boiling point, and boiling range	Not available.
Flash point	Open cup: >190°C (>374°F) [Cleveland ASTM D 92]
Evaporation rate	Not available.
	Not applicable. Based on - Physical state
Lower and upper explosion limit/flammability limit	Not available.

Vapour pressure			Vapour Pressure at 20°C			Vapour pressure at 50°C		
	Ing	redient name	mm Hg	kPa	Method	mm Hg	kPa	Method
	hydr	llates (petroleum), otreated heavy ffinic	<0.08	<0.011	ASTM D 5191			
Relative vapour density	Not	available.			*			
Relative density	Not	available.						
Density	<10	00 kg/m³ (<1 g/ci	m³) at 15°	C				
Solubility(ies)								
Media		Result						
water		Not soluble						
Solubility in water	Not	available.						
Partition coefficient: n- octanol/water	Not	applicable.						
Auto-ignition temperature	Not available.							
Decomposition temperature	Not	available.						
Viscosity		matic: 32 mm²/s matic: 5.26 mm²			0°C (ASTM	D 445)		
Particle characteristics								
Median particle size	Not	applicable.						
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				(Au	stralia)		(ENGLISH)

Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame).
Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure	Routes of entry anticipated: Dermal, Inhalation, Eyes.		
Potential acute health effects			
Eye contact	No known significant effects or critical hazards.		
Inhalation	Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.		
Skin contact	Defatting to the skin. May cause skin dryness and irritation.		
Ingestion	No known significant effects or critical hazards.		
Symptoms related to the physical, chemical and toxicological characteristics			

Eye contact	No specific data.
Inhalation	No specific data.
Skin contact	Adverse symptoms may include the following: irritation dryness cracking
Ingestion	No specific data.

Delayed and immediate effect	ts as well as chronic effects from short and long-term exposure
Eye contact	Potential risk of transient stinging or redness if accidental eye contact occurs.
Inhalation	Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
Skin contact	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis.
Ingestion	Ingestion of large quantities may cause nausea and diarrhoea.
General	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.

Persistence and degradability

Expected to be biodegradable.

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

Mobility in soil	
Soil/water partition coefficient (K _{oc})	Not available.
Mobility	Spillages may penetrate the soil causing ground water contamination.
Other ecological information	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Special Precautions for Landfill or Incineration

No additional special precautions identified.

Section 14. Transport information

	ADG	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

Special precautions for user Not available.

Section 15. Regulatory information

Standard for the Uniform Sche	duling of Medicines and Poisons
Not regulated.	
Model Work Health and Safety	Regulations - Scheduled Substances
No listed substance	
Montreal Protocol	
Not listed.	
Stockholm Convention on Pe	rsistent Organic Pollutants
Not listed.	
Rotterdam Convention on Pri	or Informed Consent (PIC)
Not listed.	
International lists	
National inventory	
REACH Status	For the REACH status of this product please consult your company contact, as
	identified in Section 1.
Australia inventory (AIIC)	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (CSCL)	All components are listed or exempted.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory	At least one component is not listed.
(PICCS)	
Taiwan Chemical	All components are listed or exempted.
Substances Inventory (TCSI)	
	All components are active or exempted
(TSCA 8b)	All components are active of exempted.
United States inventory (TSCA 8b)	All components are active or exempted.

Section 16. Any other relevant information

<u>History</u>				
Date of printing	8/16/2023			
Date of issue/Date of revision	8/16/2023			
Date of previous issue	8/15/2023			
Version	6.02			
Prepared by	Product Stewardship			
Key to abbreviations	ADG = Australian Dangerous Goods ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) NOHSC = National Occupational Health and Safety Commission REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006] STEL = Short term exposure limit SUSMP = Standard Uniform Schedule of Medicine and Poisons			
Product name Hyspin AWS 32		Product code	456615-AU22	Page: 8/9
Version 6.02 Date of issue 8	/16/2023	Format Australia	Language	ENGLISH
		(Australia)		(ENGLISH)

Section 16. Any other relevant information

UN = United Nations TWA = Time weighted average VOC = Volatile Organic Compound SADT = Self-Accelerating Decomposition Temperature Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

Procedure used to derive the classification

Classification	Justification	
Not classified.		

V Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

SAFETY DATA SHEET



Hyspin AWS 46

Section 1. Identification

GHS product identifier	Hyspin AWS 46
Product code	456617-AU22
SDS no.	456617
Relevant identified uses of the	e substance or mixture and uses advised against
Use of the substance/ mixture	Hydraulic fluid. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Manufacturer	
Supplier	Castrol Australia Pty Ltd Level 17, 717 Bourke Street Docklands, Victoria 3008 ABN 87 008 459 407 www.castrol.com.au
	Tel: +61 (03) 9268 4111
EMERGENCY TELEPHONE NUMBER	+61 2801 44558 (or 1800 14 14 74 within Australia)
OTHER PRODUCT INFORMATION	Technical Advice Helpline Number: 1300 557 998

Section 2. Hazard(s) identification

Classification of the substance or mixture

Not classified.

GHS label elements	
Signal word	No signal word.
Hazard statements	No known significant effects or critical hazards.
Precautionary statements	
Prevention	Not applicable.
Response	Not applicable.
Storage	Not applicable.
Disposal	Not applicable.
Supplemental label elements	Not applicable.
Other hazards which do not result in classification	Defatting to the skin. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

Product nameHyspin AWS 46Version5.01Date of issue8/16/2023

Section 3. Composition and ingredient information

Substance/mixture Mixture

Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

Ingredient name	% (w/w)	CAS number
Sistillates (petroleum), hydrotreated heavy paraffinic	≥90	64742-54-7

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description o	f necessary	first aid	measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Skin contact	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms. Indication of immediate medical attention and special treatment needed, if necessary Notes to physician Treatment should in general be symptomatic and directed to relieving any effects. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes. **Specific treatments** No specific treatment. **Protection of first-aiders** No action shall be taken involving any personal risk or without suitable training.

Section 5. Firefighting measures

Version 5.01 Date of issue 8/16/2023

Extinguishing media	
Suitable extinguishing media	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.
Unsuitable extinguishing media	Do not use water jet.
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	Combustion products may include the following: carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide)
Product name Hyspin AWS 46	Product code 456617-AU22 Page: 2/9

Format Australia

(Australia)

Language ENGLISH

(ENGLISH)

Section 5. Firefighting measures

Special protective actions for fire-fighters	No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
Special protective equipment for fire-fighters	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures			
For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.		
For emergency responders	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".		
Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).		
Methods and material for conta	Methods and material for containment and cleaning up		
Small spill	Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.		
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.		

Section 7. Handling and storage

Precautions for safe handling

recautions for sale nandling	
Protective measures	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
Not suitable	Prolonged exposure to elevated temperature

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
	Safe Work Australia (Australia). TWA: 5 mg/m³ 8 hours. Issued/Revised: 5/1995 Form: Mist

Biological exposure indices

No exposure indices known.

	gloves depends upon the chemicals being handled, the conditions of work and use,			
	gioves depends upon the chemicals being handled, the conditions of work and use,			
Skin protection Hand protection	Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective			
Eye/face protection	Safety glasses with side shields.			
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.			
Individual protection measures				
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.			
	organisation for standards. Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.			
	maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national			
Appropriate engineering controls	All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly			

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Section 8. Exposure controls and personal protection

Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
<u>Refer to standards:</u>	Respiratory protection:AS/NZS 1715 and AS/NZS 1716 Gloves:AS/NZS 2161.1 Eye protection:AS/NZS 1336 and AS/NZS 1337

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	Liquid.						
Colour	Yellow.						
Odour	Not available.						
Odour threshold	Not available.						
рН	Not applicable.						
Melting point	Not available.						
Boiling point, initial boiling point, and boiling range	Not available.						
Flash point	Open cup: >190°C ((>374°F) [(Clevelar	nd]			
Evaporation rate	Not available.						
	Not applicable. Base	ed on - Phy	ysical st	ate			
Lower and upper explosion limit/flammability limit	Not available.						
Vapour pressure	Not available.						
		Vapou	r Press	sure at 20°C	Vap	our pres	sure at 50°C
	Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
Relative vapour density	Not available.						
	NUL avaliable.						
Relative density	Not available.						
Relative density Density		cm³) at 15°	С				
•	Not available.	cm³) at 15°	С				
Density	Not available.	cm³) at 15°	С				

Not available.

Not available.

Not available.

olubility in water Partition coefficient: noctanol/water Auto-ignition temperature **Decomposition temperature** Viscosity

Particle characteristics Median particle size

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Kinematic: 46 mm²/s (46 cSt) at 40°C Kinematic: 6.65 mm²/s (6.65 cSt) at 100°C

Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame).
Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure	Routes of entry anticipated: Dermal, Inhalation.		
Potential acute health effects			
Eye contact	No known significant effects or critical hazards.		
Inhalation	Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.		
Skin contact	Defatting to the skin. May cause skin dryness and irritation.		
Ingestion	No known significant effects or critical hazards.		

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	No specific data.
Inhalation	No specific data.
Skin contact	Adverse symptoms may include the following: irritation dryness cracking
Ingestion	No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure Eye contact Potential risk of transient stinging or redness if accidental eye contact occurs. Inhalation Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract. **Skin contact** Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis. Ingestion Ingestion of large quantities may cause nausea and diarrhoea. General No known significant effects or critical hazards. Carcinogenicity No known significant effects or critical hazards. **Mutagenicity** No known significant effects or critical hazards. Teratogenicity No known significant effects or critical hazards. **Developmental effects** No known significant effects or critical hazards.

Fertility effects No known significant effects or critical hazards.

Persistence and degradability

Expected to be biodegradable.

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

Mobility in soil	
Soil/water partition coefficient (K _{oc})	Not available.
Mobility	Spillages may penetrate the soil causing ground water contamination.
Other ecological information	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Special Precautions for Landfill or Incineration

No additional special precautions identified.

Section 14. Transport information

•				
	ADG	IMDG	ΙΑΤΑ	
UN number	Not regulated.	Not regulated.	Not regulated.	
UN proper shipping name	-	-	-	
Transport hazard class(es)	-	-	-	
Packing group	-	-	-	
Environmental hazards	No.	No.	No.	
Additional information	-	-	-	

Special precautions for user Not available.

 Product name
 Hyspin AWS 46
 Product code
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 Language
 ENGLISH

 (Australia)
 (ENGLISH)

Section 15. Regulatory information

5	, ,
Standard for the Uniform Sche	eduling of Medicines and Poisons
Not regulated.	
Model Work Health and Safety	<u>regulations - Scheduled Substances</u>
No listed substance	
Montreal Protocol	
Not listed.	
Stockholm Convention on Pe	ersistent Organic Pollutants
Not listed.	
Rotterdam Convention on Pr	ior Informed Consent (PIC)
Not listed.	
International lists	
National inventory	
REACH Status	For the REACH status of this product please consult your company contact, as identified in Section 1.
Australia inventory (AIIC)	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (CSCL)	All components are listed or exempted.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI)	All components are listed or exempted.
United States inventory (TSCA 8b)	All components are active or exempted.

Section 16. Any other relevant information

<u>History</u>				
Date of printing	8/16/2023			
Date of issue/Date of revision	8/16/2023			
Date of previous issue	8/15/2023			
Version	5.01			
Prepared by	Product Stewardship			
Key to abbreviations	ADG = Australian Danger ATE = Acute Toxicity Esti BCF = Bioconcentration F GHS = Globally Harmoniz IATA = International Air T IBC = International Air T IBC = International Mar LogPow = logarithm of the MARPOL = International 0 1973 as modified by the F NOHSC = National Occup REACH = Registration, E Regulation [Regulation (E STEL = Short term expos SUSMP = Standard Uniform	mate Factor ransport Association Container itime Dangerous Goods e octanol/water partition of Convention for the Preve Protocol of 1978. ("Marpo pational Health and Safet valuation, Authorisation a C) No. 1907/2006] ure limit rm Schedule of Medicine	coefficient ntion of Pollution I" = marine polluti y Commission and Restriction of and Poisons	From Ships, on)
Product name Hyspin AWS 46		Product code	456617-AU22	Page: 8/9
Version 5.01 Date of issue 8	/16/2023	Format Australia	Language	ENGLISH
		(Australia)		(ENGLISH)

Section 16. Any other relevant information

UN = United Nations TWA = Time weighted average VOC = Volatile Organic Compound SADT = Self-Accelerating Decomposition Temperature Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

Procedure used to derive the classification

Classification	Justification	
Not classified.		

V Indicates information that has changed from previously issued version.

Notice to reader

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The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

SAFETY DATA SHEET



Hyspin AWS 68

Section 1. Identification

GHS product identifier	Hyspin AWS 68
Product code	456618-AU24
SDS no.	456618
Relevant identified uses of the	e substance or mixture and uses advised against
Use of the substance/ mixture	Hydraulic fluid. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Manufacturer	
Supplier	Castrol Australia Pty Ltd Level 17, 717 Bourke Street Docklands, Victoria 3008 ABN 87 008 459 407 www.castrol.com.au
	Tel: +61 (03) 9268 4111
EMERGENCY TELEPHONE NUMBER	+61 2801 44558 (or 1800 14 14 74 within Australia)
OTHER PRODUCT INFORMATION	Technical Advice Helpline Number: 1300 557 998

Section 2. Hazard(s) identification

Classification of the substance or mixture

Not classified.

GHS label elements		
Signal word	No signal word.	
Hazard statements	No known significant effects or critical hazards.	
Precautionary statements		
Prevention	Not applicable.	
Response	Not applicable.	
Storage	Not applicable.	
Disposal	Not applicable.	
Supplemental label elements	Not applicable.	
Other hazards which do not result in classification	Defatting to the skin. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.	

Product nameHyspin AWS 68Version5.02Date of issue8/16/2023

Section 3. Composition and ingredient information

Substance/mixture

Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

Mixture

Ingredient name	% (w/w)	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	≥30 - ≤60	64742-54-7
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≥30 - ≤60	64742-65-0

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.	
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms occur.	
Skin contact	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.	
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.	

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects.		
	Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.		
Specific treatments	No specific treatment.		
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.		

Section 5. Firefighting measures

Extinguishing media		
Suitable extinguishing media	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.	
Unsuitable extinguishing media	Do not use water jet.	
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst.	
Product name Hyspin AWS 68	Product code 456618-AU24 Page: 2/9	

Version 5.02 Date of issue 8/16/2023

Product code456618-AU24Page: 2/9Format AustraliaLanguageENGLISH(Australia)(ENGLISH)

Section 5. Firefighting measures

Hazardous thermal decomposition products	Combustion products may include the following: carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide)
Special protective actions for fire-fighters	No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
Special protective equipment for fire-fighters	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures			
For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.		
For emergency responders	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".		
Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).		
Methods and material for containment and cleaning up			

Small spill	Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling	
Protective measures	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
Not suitable	Prolonged exposure to elevated temperature

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Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated heavy paraffinic	Safe Work Australia (Australia). [Oil mist, refined mineral] TWA: 5 mg/m ³ 8 hours. Issued/Revised: 5/1995 Form: Mist
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Safe Work Australia (Australia). [Oil mist, refined mineral] TWA: 5 mg/m ³ 8 hours. Issued/Revised: 5/1995 Form: Mist

Biological exposure indices

No exposure indices known.

Appropriate engineering controls	All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	Safety glasses with side shields.
Skin protection	
Hand protection	Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

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	• •
Skin protection	Use of protective clothing is good industrial practice. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
<u>Refer to standards:</u>	Respiratory protection:AS/NZS 1715 and AS/NZS 1716 Gloves:AS/NZS 2161.1 Eye protection:AS/NZS 1336 and AS/NZS 1337

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

<u>Appearance</u>							
Physical state	Liquid.						
Colour	Amber. [Light]						
Odour	Mild						
Odour threshold	Not available.						
рН	Not applicable.						
Melting point	Not available.						
Boiling point, initial boiling point, and boiling range	Not available.						
Flash point	Closed cup: 216°C ((420.8°F)	Pensky-	Martens AST	M D 93]		
Evaporation rate	Not available.						
	Not applicable. Base	ed on - Ph	ysical st	ate			
Lower and upper explosion limit/flammability limit	Not available.						
Vapour pressure		Vapou	ır Press	ure at 20°C	Vap	our press	ure at 50°C
	Ingredient name	mm Ha	kPa	Method	mm	kPa	Method

	Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
	Distillates (petroleum), hydrotreated heavy paraffinic	<0.08	<0.011	ASTM D 5191			
	Distillates (petroleum), solvent-dewaxed heavy paraffinic	<0.08	<0.011	ASTM D 5191			
Relative vapour density	Not available.		•				
Relative density	Not available.						
Density Solubility(ies)	<1000 kg/m³ (<1 g/c	m³) at 15°	С				

Product name	Hyspin AWS 68	Product code	456618-AU24	Page: 5/9
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Section 9. Physical and chemical properties

Media	Result
water	Not soluble
Solubility in water	Not available.
Partition coefficient: n- octanol/water	Not applicable.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Kinematic: 68 mm²/s (68 cSt) at 40°C Kinematic: 8.6 mm²/s (8.6 cSt) at 100°C (ASTM D 445)
Particle characteristics	
Median particle size	Not applicable.

Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame).
Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure	Routes of entry anticipated: Dermal, Inhalation, Eyes.
Potential acute health effects	
Eye contact	No known significant effects or critical hazards.
Inhalation	Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.
Skin contact	Defatting to the skin. May cause skin dryness and irritation.
Ingestion	No known significant effects or critical hazards.
Symptoms related to the physic	cal, chemical and toxicological characteristics
Eye contact	No specific data.
Inhalation	No specific data.
Skin contact	Adverse symptoms may include the following: irritation dryness cracking
Ingestion	No specific data.
Delayed and immediate effects	as well as chronic effects from short and long-term exposure
Eye contact	Potential risk of transient stinging or redness if accidental eye contact occurs.
Inhalation	Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
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Section 11. Toxicological information

Skin contact	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis.
Ingestion	Ingestion of large quantities may cause nausea and diarrhoea.
General	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.

Section 12. Ecological information

Persistence and degradability

Expected to be biodegradable.

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

<u>Mobility in soil</u>	
Soil/water partition coefficient (Koc)	Not available.
Mobility	Spillages may penetrate the soil causing ground water contamination.

Other ecological information

Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methods	The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Special Precautions for Landfill or Incineration	No additional special precautions identified.

Section 14. Transport information

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Section 14. Transport information			
	ADG	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

Special precautions for user Not available.

Section 15. Regulatory information

Standard for the Uniform Sch	eduling of Medicines and Poisons
Not regulated.	
Model Work Health and Safet	y Regulations - Scheduled Substances
No listed substance	
Montreal Protocol	
Not listed.	
Stockholm Convention on P	ersistent Organic Pollutants
Not listed.	
Rotterdam Convention on P	rior Informed Consent (PIC)
Not listed.	
International lists	
National inventory	
REACH Status	For the REACH status of this product please consult your company contact, as identified in Section 1.
Australia inventory (AIIC)	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (CSCL)	All components are listed or exempted.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	At least one component is not listed.
Taiwan Chemical Substances Inventory (TCSI)	All components are listed or exempted.
United States inventory (TSCA 8b)	All components are active or exempted.

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Section 16. Any other relevant information

<u>History</u>	
Date of printing	8/16/2023
Date of issue/Date of revision	8/16/2023
Date of previous issue	8/15/2023
Version	5.02
Prepared by	Product Stewardship
Key to abbreviations	ADG = Australian Dangerous Goods ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) NOHSC = National Occupational Health and Safety Commission REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006] STEL = Short term exposure limit SUSMP = Standard Uniform Schedule of Medicine and Poisons UN = United Nations TWA = Time weighted average VOC = Volatile Organic Compound SADT = Self-Accelerating Decomposition Temperature Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

Procedure used to derive the classification

Classification	Justification	
Not classified.		

✓ Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

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SAFETY DATA SHEET



Hyspin AWS 100

Section 1. Identification

GHS product identifier	Hyspin AWS 100
Product code	456612-AU22
SDS no.	456612
Relevant identified uses of the	substance or mixture and uses advised against
Use of the substance/ mixture	Hydraulic fluid. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Manufacturer	
Supplier	Castrol Australia Pty Ltd Level 17, 717 Bourke Street Docklands, Victoria 3008 ABN 87 008 459 407 www.castrol.com.au
	Tel: +61 (03) 9268 4111
EMERGENCY TELEPHONE NUMBER	+61 2801 44558 (or 1800 14 14 74 within Australia)
OTHER PRODUCT INFORMATION	Technical Advice Helpline Number: 1300 557 998

Section 2. Hazard(s) identification

Classification of the substance or mixture

Not classified.

GHS label elements	
Signal word	No signal word.
Hazard statements	No known significant effects or critical hazards.
Precautionary statements	
Prevention	Not applicable.
Response	Not applicable.
Storage	Not applicable.
Disposal	Not applicable.
Supplemental label elements	Not applicable.
Other hazards which do not result in classification	Defatting to the skin. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

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Section 3. Composition and ingredient information

Substance/mixture Mixture

Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

Ingredient name	% (w/w)	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	≥90	64742-54-7
Residual oils (petroleum), solvent-dewaxed	≤5	64742-62-7
Residual oils (petroleum), hydrotreated	≤5	64742-57-0

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Skin contact	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medic	<u>al attention and special treatment needed, if necessary</u>
Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects.
	Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.
Specific treatments	No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.

Section 5. Firefighting measures

Extinguishing media Suitable extinguishing media	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.
Unsuitable extinguishing media	Do not use water jet.
Specific hazards arising	In a fire or if heated, a pressure increase will occur and the container may burst.

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Section 5. Firefighting measures

Hazardous thermal decomposition products	Combustion products may include the following: carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide)
Special protective actions for fire-fighters	No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
Special protective equipment for fire-fighters	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.			
For emergency responders	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".			
Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).			
Methods and material for conta	ainment and cleaning up			
Small spill	Stop leak if without risk. Move containers from spill area. Absorb with an inert			

Small spillStop leak if without risk. Move containers from spill area. Absorb with an inert
material and place in an appropriate waste disposal container. Dispose of via a
licensed waste disposal contractor.Large spillStop leak if without risk. Move containers from spill area. Prevent entry into sewers,
water courses, basements or confined areas. Contain and collect spillage with non-
combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth
and place in container for disposal according to local regulations. Dispose of via a

licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling				
Protective measures	Put on appropriate personal protective equipment (see Section 8).			
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is nandled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.			
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.			
Not suitable	Prolonged exposure to elevated temperature			

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated heavy paraffinic	Safe Work Australia (Australia). [Oil mist, refined mineral] TWA: 5 mg/m ³ 8 hours. Issued/Revised: 5/1995 Form: Mist
Residual oils (petroleum), solvent-dewaxed	Safe Work Australia (Australia). [Oil mist, refined mineral] TWA: 5 mg/m ³ 8 hours. Issued/Revised: 5/1995 Form: Mist
Residual oils (petroleum), hydrotreated	Safe Work Australia (Australia). [Oil mist, refined mineral] TWA: 5 mg/m ³ 8 hours. Issued/Revised: 5/1995 Form: Mist

Biological exposure indices

No exposure indices known.

controlsthey comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.Individual protection measuresWash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.Eye/face protection Mand protectionSafety glasses with side shields.Kin protection resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use,	Appropriate engineering controls	All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.				
Hygiene measuresWash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.Eye/face protectionSafety glasses with side shields.Mean protectionWear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use,	Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process				
 eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Eye/face protection Skin protection Hand protection Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, 	Individual protection measures					
Skin protection Hand protection Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use,	Hygiene measures	eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and				
Hand protectionWear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use,	Eye/face protection	•				
resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use,	Skin protection					
down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.	Hand protection	resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the				
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Skin protection	Use of protective clothing is good industrial practice.
-	Personal protective equipment for the body should be selected based on the task
	being performed and the risks involved and should be approved by a specialist
	before handling this product.
	Cotton or polyester/cotton overalls will only provide protection against light
	superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
<u>Refer to standards:</u>	Respiratory protection:AS/NZS 1715 and AS/NZS 1716 Gloves:AS/NZS 2161.1 Eye protection:AS/NZS 1336 and AS/NZS 1337

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	Liquid.
Colour	Amber. [Light]
Odour	Not available.
Odour threshold	Not available.
рН	Not applicable.
Melting point	Not available.
Boiling point, initial boiling point, and boiling range	Not available.
Flash point	Closed cup: >190°C (>374°F) [Pensky-Martens ASTM D 93]
Evaporation rate	Not available.
	Not applicable. Based on - Physical state
Lower and upper explosion	Not available.

Lower and upper explosion limit/flammability limit Vapour pressure

Vapour pressure	/apour pressure			Vapour Pressure at 20°C			Vapour pressure at 50°C		
	Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method		
	Distillates (petroleum), hydrotreated heavy paraffinic	<0.08	<0.011	ASTM D 5191					
	Residual oils (petroleum), solvent- dewaxed	<0.08	<0.011	ASTM D 5191					
	Residual oils (petroleum), hydrotreated	<0.08	<0.011	ASTM D 5191					
Relative vapour density	Not available.								
Relative density	Not available.								
Density	<1000 kg/m³ (<1 g/cm³) at 15°C								
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Section 9. Physical and chemical properties

Solubility(ies)

Media		Result	
water		Not soluble	
Solubility in water	Not a	available.	
Partition coefficient: n- octanol/water	Not a	applicable.	
Auto-ignition temperature	Not a	available.	
Decomposition temperature	Not a	available.	
Viscosity		matic: 100 mm²/s (100 cSt) at 40°C matic: 11.1 mm²/s (11.1 cSt) at 100°C (ASTM D 445)	
Particle characteristics			
Median particle size	Not a	applicable.	

Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.	
Chemical stability	The product is stable.	
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.	
Conditions to avoid	Avoid all possible sources of ignition (spark or flame).	
Incompatible materials Reactive or incompatible with the following materials: oxidising materials		
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.	

Section 11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure	Routes of entry anticipated: Dermal, Inhalation, Eyes.
Potential acute health effects	
Eye contact	No known significant effects or critical hazards.
Inhalation	Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.
Skin contact	Defatting to the skin. May cause skin dryness and irritation.
Ingestion	No known significant effects or critical hazards.
Symptoms related to the physi	cal, chemical and toxicological characteristics
Eye contact	No specific data.
Inhalation	No specific data.
Skin contact	Adverse symptoms may include the following: irritation dryness cracking
Ingestion	No specific data.
Delayed and immediate effects	as well as chronic effects from short and long-term exposure
Eye contact	Potential risk of transient stinging or redness if accidental eye contact occurs.
Inhalation	Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
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	(Australia) (ENGLISH)

Section 11. Toxicological information

Skin contact	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis.
Ingestion	Ingestion of large quantities may cause nausea and diarrhoea.
General	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects No known significant effects or critical hazards.	
Fertility effects	No known significant effects or critical hazards.

Section 12. Ecological information

Persistence and degradability

Expected to be biodegradable.

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

<u>Mobility in soil</u>	
Soil/water partition coefficient (Koc)	Not available.
Mobility	Spillages may penetrate the soil causing ground water contamination.

Other ecological information Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methods	The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Special Precautions for Landfill or Incineration	No additional special precautions identified.

Section 14. Transport information

Product name	Hyspin AWS 100	Product code 456612	2-AU22 Page: 7/9
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		(Australia)	(ENGLISH)

	ection 14. Transport information				
UN number	Not regulated.	Not regulated.	Not regulated.		
UN proper shipping name	-	-	-		
Transport hazard class(es)	-	-	-		
Packing group	-	-	-		
Environmental hazards	No.	No.	No.		
Additional information	-	-	-		

Special precautions for user Not available.

Section 15. Regulatory information

Standard for the Uniform Sche	eduling of Medicines and Poisons
Not regulated.	
Model Work Health and Safety	<u>regulations - Scheduled Substances</u>
No listed substance	
Montreal Protocol	
Not listed.	
Stackholm Convention on D	ensistent Ornenia Dellutente
Stockholm Convention on Pe	<u>arsistent Organic Pollutants</u>
Not listed.	
Rotterdam Convention on Pr	<u>ior Informed Consent (PIC)</u>
Not listed.	
International lists	
National inventory	
REACH Status	For the REACH status of this product please consult your company contact, as identified in Section 1.
Australia inventory (AIIC)	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (CSCL)	All components are listed or exempted.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	At least one component is not listed.
Taiwan Chemical Substances Inventory (TCSI)	All components are listed or exempted.
United States inventory (TSCA 8b)	All components are active or exempted.

Product name	Hyspin AWS 10	00		Product code	456612-AU22	Page: 8/9
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				(Australia)		(ENGLISH)

Section 16. Any other relevant information

<u>History</u>	
Date of printing	8/16/2023
Date of issue/Date of revision	8/16/2023
Date of previous issue	8/15/2023
Version	4.02
Prepared by	Product Stewardship
Key to abbreviations	ADG = Australian Dangerous Goods ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) NOHSC = National Occupational Health and Safety Commission REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006] STEL = Short term exposure limit SUSMP = Standard Uniform Schedule of Medicine and Poisons UN = United Nations TWA = Time weighted average VOC = Volatile Organic Compound SADT = Self-Accelerating Decomposition Temperature Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

Procedure used to derive the classification

Classification	Justification
Not classified.	

✓ Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

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SAFETY DATA SHEET



Hyspin AWS 150

Section 1. Identification

GHS product identifier	Hyspin AWS 150
Product code	456613-AU22
SDS no.	456613
Relevant identified uses of the	substance or mixture and uses advised against
Use of the substance/ mixture	Hydraulic fluid. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Manufacturer	
Supplier	Castrol Australia Pty Ltd Level 17, 717 Bourke Street Docklands, Victoria 3008 ABN 87 008 459 407 www.castrol.com.au
	Tel: +61 (03) 9268 4111
EMERGENCY TELEPHONE NUMBER	+61 2801 44558 (or 1800 14 14 74 within Australia)
OTHER PRODUCT INFORMATION	Technical Advice Helpline Number: 1300 557 998

Section 2. Hazard(s) identification

Classification of the substance or mixture

Not classified.

GHS label elements	
Signal word	No signal word.
Hazard statements	No known significant effects or critical hazards.
Precautionary statements	
Prevention	Not applicable.
Response	Not applicable.
Storage	Not applicable.
Disposal	Not applicable.
Supplemental label elements	Not applicable.
Other hazards which do not result in classification	Defatting to the skin. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

Product nameHyspin AWS 150Version 2.02Date of issue 8/16/2023

Section 3. Composition and ingredient information

Substance/mixture Mixture

Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

Ingredient name	% (w/w)	CAS number
₱istillates (petroleum), hydrotreated heavy paraffinic	≥75 - ≤90	64742-54-7
Residual oils (petroleum), solvent-dewaxed	≥10 - ≤30	64742-62-7
Residual oils (petroleum), hydrotreated	≥10 - ≤30	64742-57-0

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Skin contact	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medica	al attention and special treatment needed, if necessary
Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects.
	Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.
Specific treatments	No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.

Section 5. Firefighting measures

Extinguishing media	
Suitable extinguishing media	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.
Unsuitable extinguishing media	Do not use water jet.

 Specific hazards arising from the chemical
 In a fire or if heated, a pressure increase will occur and the container may burst.

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Section 5. Firefighting measures

Hazardous thermal decomposition products	Combustion products may include the following: carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide)
Special protective actions for fire-fighters	No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
Special protective equipment for fire-fighters	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures		
For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.	
For emergency responders	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".	
Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).	
Methods and material for conta	ainment and cleaning up	
Small spill	Stop leak if without risk. Move containers from spill area. Absorb with an inert	

Small spillStop leak if without risk. Move containers from spill area. Absorb with an inert
material and place in an appropriate waste disposal container. Dispose of via a
licensed waste disposal contractor.Large spillStop leak if without risk. Move containers from spill area. Prevent entry into sewers,
water courses, basements or confined areas. Contain and collect spillage with non-
combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth
and place in container for disposal according to local regulations. Dispose of via a

licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling	
Protective measures	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
Not suitable	Prolonged exposure to elevated temperature

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits		
Distillates (petroleum), hydrotreated heavy paraffinic	Safe Work Australia (Australia). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 5/1995 Form: Mist		
Residual oils (petroleum), solvent-dewaxed	Safe Work Australia (Australia). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 5/1995 Form: Mist		
Residual oils (petroleum), hydrotreated	Safe Work Australia (Australia). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 5/1995 Form: Mist		

Biological exposure indices

No exposure indices known.

Appropriate engineering controls	All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	Safety glasses with side shields.
Skin protection	
Hand protection	Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Use of protective clothing is good industrial practice.
Personal protective equipment for the body should be selected based on the task
being performed and the risks involved and should be approved by a specialist before handling this product.
Cotton or polyester/cotton overalls will only provide protection against light
superficial contamination that will not soak through to the skin. Overalls should be
laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.
Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
Respiratory protection:AS/NZS 1715 and AS/NZS 1716 Gloves:AS/NZS 2161.1 Eye protection:AS/NZS 1336 and AS/NZS 1337

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

<u>Appearance</u>							
Physical state	Liquid.						
Colour	Amber.						
Odour	Slight						
Odour threshold	Not available.						
рН	Not available.						
Melting point	Not available.						
Boiling point, initial boiling point, and boiling range	Not available.						
Flash point	Closed cup: >190°C	(>374°F)	[Pensky	-Martens]			
Evaporation rate	Not available.						
	Not applicable. Base	ed on - Ph	ysical sta	ate			
Lower and upper explosion limit/flammability limit	Not available.						
Vapour pressure	Not available.						
	Vapour Pressure at 20°C Vapour pressure a						
		Vapoι	ır Press	ure at 20°C	Vap	our pres	sure at 50°C
	Ingredient name	Vapou mm Hg	ır Press kPa	ure at 20°C	Vap mm Hg	our pres kPa	sure at 50°C Method
	Ingredient name		1	1	mm		1
Relative vapour density			1	1	mm		1
Relative vapour density Relative density	Ingredient name Not available. Not available.		1	1	mm		1
Relative density	Not available. Not available.	mm Hg	kPa	1	mm		1
	Not available.	mm Hg	kPa	1	mm		1
Relative density Density Solubility(ies)	Not available. Not available.	mm Hg	kPa	1	mm		1
Relative density Density Solubility(ies) Not available.	Not available. Not available. <1000 kg/m³ (<1 g/c	mm Hg	kPa °C	1	mm Hg	kPa	1

(Australia)

(ENGLISH)

Section 9. Physical and chemical properties

Partition coefficient: n- octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Kinematic: 150 mm²/s (150 cSt) at 40°C Kinematic: 14.5 mm²/s (14.5 cSt) at 100°C
Particle characteristics	

Median particle size

Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame).
Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure	Routes of entry anticipated: Dermal, Inhalation.		
Potential acute health effects			
Eye contact	No known significant effects or critical hazards.		
Inhalation	Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.		
Skin contact	Defatting to the skin. May cause skin dryness and irritation.		
Ingestion	No known significant effects or critical hazards.		

Symptoms related to the	phy	sical, chemical and toxicologica	l characteristics

Eye contact	No specific data.
Inhalation	No specific data.
Skin contact	Adverse symptoms may include the following: irritation dryness cracking
Ingestion	No specific data.

Delayed and immediate e	effects as well as chronic effects from short and long-term exposure
Eye contact	Potential risk of transient stinging or redness if accidental eye contact occurs.
Inhalation	Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
Skin contact	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis.
Ingestion	Ingestion of large quantities may cause nausea and diarrhoea.
General	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.

Product name	Hyspin AWS 18	50		Product code	456613-AU22	Page: 6/9
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Section 11. Toxicological information

Mutagenicity Teratogenicity Developmental effects Fertility effects No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

Section 12. Ecological information

Persistence and degradability

Expected to be biodegradable.

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

Castion 12 Dianas	al a anaiderationa
Other ecological information	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.
Mobility	Spillages may penetrate the soil causing ground water contamination.
Soil/water partition coefficient (Koc)	Not available.
<u>Mobility in soil</u>	

Section 13. Disposal considerations

Disposal methodsThe generation of waste should be avoided or minimised wherever possible.
Significant quantities of waste product residues should not be disposed of via the
foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus
and non-recyclable products via a licensed waste disposal contractor. Disposal of
this product, solutions and any by-products should at all times comply with the
requirements of environmental protection and waste disposal legislation and any
regional local authority requirements. Waste packaging should be recycled.
Incineration or landfill should only be considered when recycling is not feasible. This
material and its container must be disposed of in a safe way. Empty containers or
liners may retain some product residues. Avoid dispersal of spilt material and runoff
and contact with soil, waterways, drains and sewers.Special Precautions for
Landfill or IncinerationNo additional special precautions identified.

Section 14. Transport information

	ADG	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Product name Hysp	in AWS 150	Product code	456613-AU22 Page: 7/9
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		(Australia)	(ENGLISH)

Section 14. Transport information				
Environmental hazards	No.	No.	No.	
Additional information	-	-	-	

Special precautions for user Not available.

Section 15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

International lists

International lists	
National inventory	
REACH Status	For the REACH status of this product please consult your company contact, as identified in Section 1.
Australia inventory (AIIC)	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (CSCL)	All components are listed or exempted.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI)	All components are listed or exempted.
United States inventory (TSCA 8b)	All components are active or exempted.

Section 16. Any other relevant information

<u>History</u>	
Date of printing	8/16/2023
Date of issue/Date of revision	8/16/2023
Date of previous issue	8/15/2023
Version	2.02
Prepared by	Product Stewardship

Product name Hyspin AWS 150Version 2.02 Date of issue 8/16/2023

Product code456613-AU22Page: 8/9Format AustraliaLanguageENGLISH(Australia)(ENGLISH)

Section 16. Any other relevant information

•	
Key to abbreviations	ADG = Australian Dangerous Goods
	ATE = Acute Toxicity Estimate
	BCF = Bioconcentration Factor
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals
	IATA = International Air Transport Association
	IBC = Intermediate Bulk Container
	IMDG = International Maritime Dangerous Goods
	LogPow = logarithm of the octanol/water partition coefficient
	MARPOL = International Convention for the Prevention of Pollution From Ships,
	1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
	NOHSC = National Occupational Health and Safety Commission
	REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
	Regulation [Regulation (EC) No. 1907/2006]
	STEL = Short term exposure limit
	SUSMP = Standard Uniform Schedule of Medicine and Poisons
	UN = United Nations
	TWA = Time weighted average
	VOC = Volatile Organic Compound
	SADT = Self-Accelerating Decomposition Temperature
	Varies = may contain one or more of the following 64741-88-4, 64741-89-5,
	64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5,
	64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1,
	64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0,
	72623-87-1
Dreadure used to derive the	

Procedure used to derive the classification

Classification	Justification
Not classified.	

✓ Indicates information that has changed from previously issued version.

Notice to reader

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It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

Product name	Hyspin AWS 1	50
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SAFETY DATA SHEET



Hyspin AWS 220

Section 1. Identification

GHS product identifier	Hyspin AWS 220
Product code	456882-AU22
SDS no.	456882
Relevant identified uses of the	substance or mixture and uses advised against
Use of the substance/ mixture	Hydraulic fluid. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Manufacturer	
Supplier	Castrol Australia Pty Ltd Level 17, 717 Bourke Street Docklands, Victoria 3008 ABN 87 008 459 407 www.castrol.com.au
	Tel: +61 (03) 9268 4111
EMERGENCY TELEPHONE NUMBER	+61 2801 44558 (or 1800 14 14 74 within Australia)
OTHER PRODUCT INFORMATION	Technical Advice Helpline Number: 1300 557 998

Section 2. Hazard(s) identification

Classification of the substance or mixture

Not classified.

GHS label elements	
Signal word	No signal word.
Hazard statements	No known significant effects or critical hazards.
Precautionary statements	
Prevention	Not applicable.
Response	Not applicable.
Storage	Not applicable.
Disposal	Not applicable.
Supplemental label elements	Not applicable.
Other hazards which do not result in classification	Defatting to the skin. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

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Section 3. Composition and ingredient information

Substance/mixture Mixture

Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

Ingredient name	% (w/w)	CAS number
Residual oils (petroleum), solvent-dewaxed	≥10 - ≤30	64742-62-7
Residual oils (petroleum), hydrotreated	≥10 - ≤30	64742-57-0
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≥10 - ≤30	64742-65-0
Distillates (petroleum), hydrotreated heavy paraffinic	≥10 - ≤30	64742-54-7

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessa	iry first aid measures
Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Skin contact	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medi	ical attention and special treatment needed, if necessary
Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects.
	Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.
Specific treatments	No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.

Section 5. Firefighting measures

Extinguishing media	
Suitable extinguishing media	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.
Unsuitable extinguishing media	Do not use water jet.

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Section 5. Firefighting measures

Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	Combustion products may include the following: carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide)
Special protective actions for fire-fighters	No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
Special protective equipment for fire-fighters	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protecti	ve equipment and emergency procedures	
For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.	
For emergency responders	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".	
Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).	
Methods and material for cont	ainment and cleaning up	
Small spill	Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.	
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.	

Section 7. Handling and storage

Precautions for safe handling	
Protective measures	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

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Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Residual oils (petroleum), solvent-dewaxed	Safe Work Australia (Australia). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 5/1995 Form: Mist
Residual oils (petroleum), hydrotreated	Safe Work Australia (Australia). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 5/1995 Form: Mist
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Safe Work Australia (Australia). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 5/1995 Form: Mist
Distillates (petroleum), hydrotreated heavy paraffinic	Safe Work Australia (Australia). TWA: 5 mg/m³ 8 hours. Issued/Revised: 5/1995 Form: Mist

Biological exposure indices

No exposure indices known.

Appropriate engineering controls	All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	Safety glasses with side shields.
Skin protection	
Hand protection	Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
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Skin protection	Use of protective clothing is good industrial practice.
	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist
	before handling this product.
	Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when
	cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
<u>Refer to standards:</u>	Respiratory protection:AS/NZS 1715 and AS/NZS 1716 Gloves:AS/NZS 2161.1 Eye protection:AS/NZS 1336 and AS/NZS 1337

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance							
Physical state	Liquid.						
Colour	Amber. [Light]						
Odour	Not available.						
Odour threshold	Not available.						
рН	Not available.						
Melting point	Not available.						
Boiling point, initial boiling point, and boiling range	Not available.						
Flash point	Closed cup: >190°C	; (>374°F)	[Pensky	/-Martens]			
Evaporation rate	Not available.						
	Not applicable. Base	ed on - Phy	ysical st	ate			
Lower and upper explosion	Not available.						
limit/flammability limit							
	Not available.						
	Not available.	Vapou	ır Press	sure at 20°C	Vap	our pres	sure at 50°C
· · · · · · · · · · · · · · · · · · ·	Not available. Ingredient name	Vapou mm Hg	ır Press kPa	sure at 20°C Method	Vap mm Hg	our pres kPa	sure at 50°C Method
Vapour pressure	Ingredient name		1	1	mm		1
Vapour pressure Relative vapour density			1	1	mm		1
Vapour pressure Relative vapour density Relative density Density	Ingredient name	mm Hg	kPa	1	mm		1
limit/flammability limit Vapour pressure Relative vapour density Relative density Density Solubility(ies) Not available. Solubility in water	Ingredient name Not available. Not available.	mm Hg	kPa	1	mm		1

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Section 9. Physical and chemical properties

Partition coefficient: n- octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Kinematic: 220 mm²/s (220 cSt) at 40°C Kinematic: 18.7 mm²/s (18.7 cSt) at 100°C
Particle characteristics	
Median particle size	

Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.	
Chemical stability	The product is stable.	
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.	
Conditions to avoid	No specific data.	
Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.	
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.	

Section 11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure	Routes of entry anticipated: Dermal, Inhalation.
Potential acute health effects	
Eye contact	No known significant effects or critical hazards.
Inhalation	Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.
Skin contact	Defatting to the skin. May cause skin dryness and irritation.
Ingestion	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	No specific data.
Inhalation	No specific data.
Skin contact	Adverse symptoms may include the following: irritation dryness cracking
Ingestion	No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure		
Eye contact	Potential risk of transient stinging or redness if accidental eye contact occurs.	
Inhalation	Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.	
Skin contact	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis.	
Ingestion	Ingestion of large quantities may cause nausea and diarrhoea.	
General	No known significant effects or critical hazards.	
Carcinogenicity	No known significant effects or critical hazards.	

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Section 11. Toxicological information

Mutagenicity Teratogenicity Developmental effects Fertility effects No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

Section 12. Ecological information

Persistence and degradability

Expected to be biodegradable.

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

<u>Mobility in soil</u>		
Soil/water partition coefficient (Koc)	Not available.	
Mobility	Spillages may penetrate the soil causing ground water contamination.	
Other ecological information	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.	
Section 13 Disposal considerations		

Section 13. Disposal considerations

Disposal methodsThe generation of waste should be avoided or minimised wherever possible.
Significant quantities of waste product residues should not be disposed of via the
foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus
and non-recyclable products via a licensed waste disposal contractor. Disposal of
this product, solutions and any by-products should at all times comply with the
requirements of environmental protection and waste disposal legislation and any
regional local authority requirements. Waste packaging should be recycled.
Incineration or landfill should only be considered when recycling is not feasible. This
material and its container must be disposed of in a safe way. Empty containers or
liners may retain some product residues. Avoid dispersal of spilt material and runoff
and contact with soil, waterways, drains and sewers.Special Precautions for
Landfill or IncinerationNo additional special precautions identified.

Section 14. Transport information

	ADG	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
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Section 14. Transport information				
Environmental hazards	No.	No.	No.	
Additional information	-	-	-	

Special precautions for user Not available.

Section 15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

International lists

international lists	
National inventory	
REACH Status	For the REACH status of this product please consult your company contact, as identified in Section 1.
Australia inventory (AIIC)	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (CSCL)	All components are listed or exempted.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI)	All components are listed or exempted.
United States inventory (TSCA 8b)	All components are active or exempted.

Section 16. Any other relevant information

<u>History</u>	
Date of printing	8/16/2023
Date of issue/Date of revision	8/16/2023
Date of previous issue	8/15/2023
Version	2.02
Prepared by	Product Stewardship

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Section 16. Any other relevant information

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Key to abbreviations	ADG = Australian Dangerous Goods
	ATE = Acute Toxicity Estimate
	BCF = Bioconcentration Factor
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals
	IATA = International Air Transport Association
	IBC = Intermediate Bulk Container
	IMDG = International Maritime Dangerous Goods
	LogPow = logarithm of the octanol/water partition coefficient
	MARPOL = International Convention for the Prevention of Pollution From Ships,
	1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
	NOHSC = National Occupational Health and Safety Commission
	REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
	Regulation [Regulation (EC) No. 1907/2006]
	STEL = Short term exposure limit
	SUSMP = Standard Uniform Schedule of Medicine and Poisons
	UN = United Nations
	TWA = Time weighted average
	VOC = Volatile Organic Compound
	SADT = Self-Accelerating Decomposition Temperature
	Varies = may contain one or more of the following 64741-88-4, 64741-89-5,
	64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5,
	64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1,
	64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0,
	72623-87-1
Dreadure used to derive the	

Procedure used to derive the classification

Classification	Justification
Not classified.	

✓ Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

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