SAFETY DATA SHEET



Hysol MB 50

Section 1. Identification

GHS product identifier Hysol MB 50
Product code 465450-AU22
SDS no. 465450

Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/ Metalworking fluid - soluble.

mixture 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 SKIN CORROSION/IRRITATION - Category 2

substance or mixture SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1

GHS label elements

Hazard pictograms



Signal word DANGER

Hazard statements H315 - Causes skin irritation.

H318 - Causes serious eye damage.

Precautionary statements

Prevention P280 - Wear protective gloves. Wear eye or face protection.

P264 - Wash hands thoroughly after handling.

Response P362 + P364 - Take off contaminated clothing and wash it before reuse.

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water. P332 + P313 - If skin irritation occurs: Get medical attention.

P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or physician.

StorageNot applicable.DisposalNot applicable.Supplemental labelNot applicable.

elements

Product name Hysol MB 50 Product code 465450-AU22 Page: 1/10

Version 6.02 Date of issue 8/16/2023 Format Australia Language ENGLISH

Section 2. Hazard(s) identification

Other hazards which do not result in classification

Defatting to the skin.

Section 3. Composition and ingredient information

Substance/mixture

Mixture

Highly refined mineral oil, emulsifiers and additives.

Ingredient name	% (w/w)	CAS number
☑istillates (petroleum), hydrotreated heavy naphthenic	≥30 - ≤60	64742-52-5
Amine neutralised carboxylic acids	≥10 - ≤30	-
2-Amino-2-methylpropanol	≤5	124-68-5
Amine neutralised carboxylic acids	<3	-
2,2',2"-nitrilotriethanol	≤3	102-71-6

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 immediately.

Chemical burns must be treated promptly by a physician.

Inhalation If inhaled, remove to fresh air. In case of inhalation of decomposition products in a

fire, symptoms may be delayed. The exposed person may need to be kept under

medical surveillance for 48 hours. Get medical attention immediately.

Skin contact Get medical attention immediately. In case of contact, immediately flush skin with

plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Wash clothing before reuse. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Clean shoes thoroughly before reuse. Chemical

burns must be treated promptly by a physician.

Ingestion Do not induce vomiting unless directed to do so by medical personnel. Never give

anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Wash out mouth with water if person is conscious. Get medical attention immediately. Chemical burns must be

treated promptly by a physician.

Most important symptoms/effects, acute and delayed

Notes to physician

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

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

Treatment should in general be symptomatic and directed to relieving any effects. In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments No specific treatment.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. If it

is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing

thoroughly with water before removing it, or wear gloves.

Product name Hysol MB 50 Product code 465450-AU22 Page: 2/10

Version 6.02 Date of issue 8/16/2023 Format Australia Language ENGLISH

Section 4. First aid measures

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide

extinguisher or spray.

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: phosphorus oxides

carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide)

nitrogen oxides (NO, NO₂ etc.)

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

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. Do not breathe 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 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. 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.

Product name Hysol MB 50

Version 6.02 Date of issue 8/16/2023

Product code 465450-AU22

5450-AU22 **Page: 3/10**

(Australia)

Format Australia

Language ENGLISH

(ENGLISH)

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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. Avoid contact of spilt material and runoff with soil and surface waterways. Avoid prolonged or repeated contact with skin. During metal working, solid particles from workpieces or tools will contaminate the fluid and may cause abrasions of the skin. Where such abrasions result in a penetration of the skin, first aid treatment should be applied as soon as reasonably possible. The presence of certain metals in the workpiece or tool, such as chromium, cobalt and nickel, can contaminate the metalworking fluid and as a result may induce allergic skin reactions. Evaporation of water from soluble cutting fluids during use may lead to an increase in concentration which may result in the development of skin conditions due to irritation and defatting. It is important to monitor fluid strength on a regular basis with a refractometer and maintain it at the recommended concentration. Lubricants from other sources and other contaminants should be minimised. Swarf and other debris should be removed. To maintain optimum performance and minimise bacterial spoilage, machine tool coolant systems should be cleaned on a regular basis.

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. DO NOT ADD NITRITES TO THIS FLUID.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated heavy naphthenic	Safe Work Australia (Australia). TWA: 5 mg/m³ 8 hours. Issued/Revised: 5/1995 Form: Mist
2-Amino-2-methylpropanol	DFG MAC-values list (Germany). Absorbed through skin. PEAK: 2 ppm, 4 times per shift, 15 minutes. Issued/Revised: 6/2014 PEAK: 7.4 mg/m³, 4 times per shift, 15 minutes. Issued/Revised: 6/2014 TWA: 3.7 mg/m³ 8 hours. Issued/Revised: 6/2014 TWA: 1 ppm 8 hours. Issued/Revised: 6/2014
2,2',2"-nitrilotriethanol	Safe Work Australia (Australia). Skin sensitiser. TWA: 5 mg/m³ 8 hours. Issued/Revised:

Product name Hysol MB 50

Product code 465450-AU22 Page: 4/10

Version 6.02 Date of issue 8/16/2023

Format Australia Language ENGLISH

(Australia)

(ENGLISH)

Section 8. Exposure controls and personal protection

4/1997

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

Undiluted fluid: Chemical goggles.

Diluted fluid: Safety glasses with side shields.

Skin protection

Hand protection Wear suitable gloves. Undiluted fluid: Wear chemical resistant gloves.

Recommended: nitrile gloves.

Diluted fluid: Wear protective gloves if prolonged or repeated contact is likely. 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.

Product name Hysol MB 50

Product code 465450-AU22 Page: 5/10

Version 6.02 Date of issue 8/16/2023

Format Australia

Language ENGLISH

(Australia)

(ENGLISH)

Section 8. Exposure controls and personal protection

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, halfmask 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.

Respiratory protection: AS/NZS 1715 and AS/NZS 1716 **Refer to standards:**

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.

Ha 9.4 to 9.9 [Conc. (% w/w): 5%]

Melting point Not available. **Boiling point, initial boiling**

point, and boiling range

Not available.

Closed cup: >100°C (>212°F) [Estimated. Water content interferes with flash point Flash point

determination.]

Not available.

Evaporation rate Not available.

Not applicable. Based on - Physical state

Lower and upper explosion limit/flammability limit

Vapour pressure

Vanour Proceure at 20°C

	vapour Pressure at 20 C			pour Pressure at 20 C vapour p		r pressure at 50 C	
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	
Distillates (petroleum), hydrotreated heavy naphthenic	<0.08	<0.011	ASTM D 5191				
Water	23.8	3.2					
2-amino- 2-methylpropanol	0.34	0.045	ASTM E 1194				
2,2',2"-nitrilotriethanol	<0.01	<0.0013					

Relative vapour density

Relative density

Density

Not available. Not available.

<1000 kg/m³ (<1 g/cm³) at 15°C

Solubility(ies)

Not available.

Solubility in water Not available.

Product name Hysol MB 50 Product code 465450-AU22 Page: 6/10

Version 6.02 Date of issue 8/16/2023 **Format Australia** Language ENGLISH

Section 9. Physical and chemical properties

Partition coefficient: n-

octanol/water

Not applicable.

Not available.

Auto-ignition temperature

Ingredient name	°C	°F	Method
2-amino-2-methylpropanol	438	820.4	ASTM D 2161
2,2',2"-nitrilotriethanol	324	615.2	

Decomposition temperature

Viscosity Not available.

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

Conditions to avoid Avoid excessive heat.

occur.

Incompatible materials Reactive or incompatible with the following materials: oxidising materials.

Slightly reactive or incompatible with the following materials: acids.

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 Causes serious eye damage.

Inhalation May give off gas, vapour or dust that is very irritating or corrosive to the respiratory

system. Exposure to decomposition products may cause a health hazard. Serious

effects may be delayed following exposure.

Skin contact Causes skin irritation. Defatting to the skin.

Ingestion May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact Adverse symptoms may include the following:

pain watering redness

Inhalation No specific data.

Skin contact Adverse symptoms may include the following:

irritation redness dryness cracking

Ingestion Adverse symptoms may include the following:

stomach pains

Delayed and immediate effects as well as chronic effects from short and long-term exposure

General No known significant effects or critical hazards.

Product name Hysol MB 50 Product code 465450-AU22 Page: 7/10

Version 6.02 Date of issue 8/16/2023 Format Australia Language ENGLISH

Section 11. Toxicological information

CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicityNo known significant effects or critical hazards.Developmental effectsNo known significant effects or critical hazards.Fertility effectsNo known significant effects or critical hazards.

Section 12. Ecological information

Persistence and degradability

Expected to be biodegradable.

Product/ingredient name Aquatic half-life Photolysis Biodegradability

2,2',2"-nitrilotriethanol - Readily

Bioaccumulative potential

Not available.

Mobility in soil

Mobility

Soil/water partition

Not available.

coefficient (Koc)

Liquid. Soluble in water.

Other adverse effects No known significant effects or critical hazards.

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. Diluted Fluid The spent diluted fluid comprises a relatively stable emulsion. Dispose of via an authorised person/licensed waste disposal contractor or by other suitable waste treatment techniques (e.g. emulsion splitting, coagulation and filtration) approved by the local authority. Spent fluid should never be disposed of down the drain. The aqueous phase should not be discharged into sewage systems unless provided for by local regulations; the non-aqueous phase should be disposed of as undiluted fluid. Note that separated aqueous solutions or effluents may contain metal salts as well as traces of oil and must be checked for conformity in these respects against consents given by the authorities before disposal. Further treatment may be required.

Special Precautions for Landfill or Incineration

No additional special precautions identified.

Product name Hysol MB 50 Product code 465450-AU22 Page: 8/10

Version 6.02 Date of issue 8/16/2023 Format Australia Language ENGLISH

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 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

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 Not determined. **China inventory (IECSC)** Not determined.

Japan inventory (CSCL) At least one component is not listed.

Korea inventory (KECI) Not determined.

Philippines inventory At least one component is not listed.

(PICCS)

Taiwan Chemical

Substances Inventory

(TCSI)

United States inventory

(TSCA 8b)

Not determined.

Not determined.

Product name Hysol MB 50

Version 6.02 Date of issue 8/16/2023

Product code 465450-AU22

Format Australia Language ENGLISH

(Australia)

(ENGLISH)

Page: 9/10

Section 16. Any other relevant information

History

Date of printing 8/16/2023

Date of issue/Date of 8/16/2023

revision

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 = 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

Procedure used to derive the classification

Classification	Justification
3 ,	Calculation method Calculation method

✓ 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.

Product name Hysol MB 50

Version 6.02 Date of issue 8/16/2023 Format Australia

ormat Australia Language ENGLISH

Product code 465450-AU22

(Australia) (ENGLISH)

Page: 10/10