MATERIALS SAFETY DATA SHEET





Zap-OX

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard Issue date: 10/18/2019 Revision date: 8/22/2024 Supersedes: 7/20/2023

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Zap-OX

Product code : ZO-16-12, ZO-16-1, ZO-16-4

1.2. Recommended use and restrictions on use

Recommended use : Cleansers

Restrictions on use : For professional use only, Industrial use

1.3. Supplier

Nanoplas Inc.

Australian Supplier: Hales Australia Pty Ltd
2950 Prairie Street South West

ABN: Hales Australia Pty Ltd
ABN: 90 107 200 322

Suite 900 Address: 45 Woodlands Drive, Braeside VICTORIA 3195

Grandville, MI, 49418 **Phone:** +61 3 8587 1600

T (616)-452-3707

Website: www.hales.com.au info@nanomoldcoating.com

Email: info@hales.com.au

1.4. Emergency telephone number

Emergency telephone numbers 24 hours – Phone: 13 11 26 (Poisons Information Centre Australia)

Phone: 1300 131 001 (ISS First Response Centre)

Within USA, Mexico and Canada: 800-535-5053 ID# 102222 Outside USA, Mexico and Canada: 1-352-323-3500 ID# 102222

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation Category 1C H314 Causes severe skin burns and eye damage

Serious eye damage Category 1 H318 Causes serious eye damage

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US) : Danger

Hazard statements (GHS US) : H314 - Causes severe skin burns and eye damage

Precautionary statements (GHS US) : P260 - Do not breathe mist, vapors.

P264 - Wash hands, forearms and face thoroughly after handling.

P280 - Wear protective gloves, protective clothing, eye protection, face protection.

P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting. P310 - Immediately call a POISON CENTER or doctor/physician

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

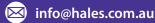
skin with water/shower.

P310 - Immediately call a POISON CENTER or doctor/physician.

P363 - Wash contaminated clothing before reuse.

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P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.

P310 - Immediately call a POISON CENTER or doctor/physician.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER or doctor/physician.

P405 - Store locked up.

P501 - Dispose of contents/container to a hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification None known

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Inhalation

Ingestion

Name	Product identifier	%
Silicon Dioxide, Quartz	CAS-No.: 14808-60-7	35 – 40
C9-11 PARETH-6	CAS-No.: 68439-46-3	5 – 10
Methyl salicylate	CAS-No.: 119-36-8	1 – 5
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	CAS-No.: 70693-62-8	1 – 5
Alkyl Dimethyl Ethylbenzyl Ammonium Chloride	CAS-No.: 85409-23-0	1 - <5

^{*}Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Move the affected person to fresh air. Get immediate medical advice/attention.

First-aid measures after skin contact Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get

immediate medical advice/attention. Wash contaminated clothing before reuse.

First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 20 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid measures after ingestion : Do NOT induce vomiting. Get immediate medical advice/attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Causes serious eye damage. Causes eye and skin burns. Severe corrosion to the respiratory

tract at high concentrations. May cause burns or irritation of the linings of the mouth, throat, and

gastrointestinal tract.

At high concentrations: Corrosive to the respiratory tract.

Skin Causes skin irritation. May cause burns.

Eyes Severe eye irritant. Risk of serious damage to eyes.

May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic symptoms No chronic health hazards are likely for this material.



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4.3. Immediate medical attention and special treatment, if necessary

Get immediate medical attention

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None.

5.2. Specific hazards arising from the chemical

: This product is not classified as flammable or combustible. Fire hazard

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Wear suitable protective clothing. Do not get in eyes, on skin, or on clothing. Keep unnecessary

and unprotected personnel away from the spillage.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe mist, spray. Do not get in eyes, on skin, or on clothing. Do

not touch or walk on the spilled product. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer

to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Do not allow product to spread into the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or

Methods for cleaning up Absorb and/or contain spill with inert material, then place in suitable container. Wash

contaminated area with large amounts of water.

Other information Dispose in a safe manner in accordance with local/national regulations. Report spill as required

by local and federal regulations.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.



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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure adequate ventilation. Do not breathe mist, spray. Avoid any direct contact with the

> product. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Handle in accordance with good industrial hygiene and safety procedures. Empty containers retain product residue and can be hazardous. Handle uncleaned empty containers as full ones.

Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after handling the

product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry, cool, well-ventilated area. Store at ambient temperature. Store locked up.

Incompatible materials : Strong oxidizers. Strong bases.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Silicon Dioxide, Quartz (14808-60-7)			
USA - ACGIH - Occupational Exposure Limits			
Local name	Silica crystaline - quartz		
ACGIH OEL TWA	0.025 mg/m³ (R - Respirable particulate matter)		
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)		
Regulatory reference	ACGIH 2024		
USA - OSHA - Occupational Exposure Limits			
Local name	Quartz (Respirable) (Silica: Crystalline)		
OSHA PEL (TWA)	0.05 mg/m³ respirable dust		
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA): Use formulas: (250 / (%SiO2+5)) for mppcf and (10 mg/m3 / (%SiO2+2)) for mg/m3. CAS No. source: eCFR Table Z-1.		
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts		

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure adequate ventilation. Emergency eye wash fountains and safety showers should be

available in the immediate vicinity of any potential exposure.

Environmental exposure controls : Do not allow product to spread into the environment.

8.3. Individual protection measures/Personal protective equipment

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I	Materials for much etims alathings
ı	Materials for protective clothing:

Use chemically protective clothing.

Hand protection:

Chemically resistant protective gloves. Consult supplier for specific recommendations.

Eye protection:

Chemical goggles





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Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. In operations where exposure limits are exceeded or exposure levels are excessive, an approved respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

Thermal hazard protection:

Not applicable.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance White. Viscous. slurry.

Color White Odor

Odor threshold : No data available

рН : ≥1-≤2 Melting point : 0 °C Freezing point : 0 °C : 100 °C Boiling point

: No data available Flash point Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Not applicable. : No data available Vapor pressure Relative vapor density at 20°C : No data available

Relative density 1.2 - 1.3

Solubility Soluble in water. completely soluble.

Partition coefficient n-octanol/water (Log Pow) No data available Auto-ignition temperature No data available Decomposition temperature No data available Viscosity, kinematic No data available Viscosity, dynamic No data available **Explosion limits** No data available Explosive properties Product is not explosive. Oxidizing properties No data available Particle Characteristics Not applicable

9.2. Other information

VOC content : 1 - 20

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts with (strong) oxidizers. Strong bases.



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10.4. Conditions to avoid

Incompatible materials.

10.5. Incompatible materials

Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

4	H	1	Inf	forma	tion o	n i	toxical	Iodical	effects

Silicon Dioxide, Quartz (14808-60-7)

Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified

	LD50 oral rat	> 22500 mg/kg	
	C9-11 PARETH-6 (68439-46-3)		
	LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)	
	LC50 Inhalation - Rat	> 1.6 mg/l/4h Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)	

Methyl salicylate (119-36-8)	
LD50 oral rat	887 mg/kg

LD50 dermal rat > 2000 mg/kg

Pentapotassium bis(peroxymonosulphate) bis	s(sulphate) (70693-62-8)
LD50 oral rat	500 mg/kg body weight (OECD 423 method)
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402 method)

Alkyl Dimethyl Ethylbenzyl Ammonium Chlori	de (85409-23-0)
LD50 oral rat	344 mg/kg
LD50 dermal rabbit	2300 mg/kg

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LD50 dermal rabbit	2300 mg/kg
Skin corrosion/irritation :	Causes severe skin burns.

	pH: ≥ 1 – ≤ 2
Serious eye damage/irritation	: Causes serious eye damage.
	pH: ≥ 1 – ≤ 2

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Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified

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Carcinogenicity	: Not classified. The Crystalline Silica is inextrictabily bound in the chemical matrix of this product
	and no exposure can occur.

Silicon Dioxide, Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans
National Toxicity Program (NTP) Status	Known Human Carcinogens
Reproductive toxicity :	Not classified

Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-repeated exposure : Not classified.

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Silicon Dioxide, Quartz (14808-60-7)		
STOT-repeated exposure	auses damage to organs through prolonged or repeated exposure.	
C9-11 PARETH-6 (68439-46-3)		
NOAEL (oral,rat,90 days)	≥ 500 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	
Pentapotassium bis(peroxymonosulphate) bis(sulphate) (70693-62-8)		
LOAEL (oral,rat,90 days)	600 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
NOAEL (oral,rat,90 days)	200 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
Viscosity, kinematic :	Not classified No data available Causes serious eye damage. Causes eye and skin burns. Severe corrosion to the respiratory tract at high concentrations. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.	
Skin : Eyes : Ingestion :	At high concentrations: Corrosive to the respiratory tract. Causes skin irritation. May cause burns. Severe eye irritant. Risk of serious damage to eyes. May cause gastrointestinal irritation, nausea, vomiting and diarrhea. No chronic health hazards are likely for this material.	

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12.1. Toxicity			
Ecology - general :	Very toxic to aquatic life.		
Silicon Dioxide, Quartz (14808-60-7)			
LC50 - Fish [1]	> 10000 mg/l		
C9-11 PARETH-6 (68439-46-3)			
LC50 - Fish [1]	5 – 7 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)		
EC50 - Crustacea [1]	2.5 mg/l Test organisms (species): Daphnia magna		
EC50 96h - Algae [1]	1.4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)		
Methyl salicylate (119-36-8)	Methyl salicylate (119-36-8)		
LC50 - Fish [1]	19.8 mg/l Pimephales promelas (Fathead minnow)		
EC50 - Crustacea [1]	28 mg/l Daphnia magna (Water flea)		
LC50 - Fish [2]	1370 mg/l Pimephales promelas (Fathead minnow)		
EC50 72h - Algae [1]	1.6 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)		
EC50 72h - Algae [2]	1.1 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)		
ErC50 algae	27 mg/l Desmodesmus subspicatus		
Pentapotassium bis(peroxymonosulphate) bis	s(sulphate) (70693-62-8)		
LC50 - Fish [1]	53 mg/l Oncorhynchus mykiss (Rainbow trout)		



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Pentapotassium bis(peroxymonosulphate) bis(sulphate) (70693-62-8)		
EC50 - Crustacea [1]	3.5 mg/l Daphnia magna (Water flea)	
Alkyl Dimethyl Ethylbenzyl Ammonium Chloride (85409-23-0)		
LC50 - Fish [1]	1.06 mg/l Oncorhynchus mykiss (Rainbow trout)	
EC50 - Crustacea [1]	0.015 mg/l Daphnia magna (Water flea)	
ErC50 algae	0.026 mg/l Pseudokirchneriella subcapitata	
NOEC (chronic)	0.004 mg/l Daphnia magna (Water flea)	
NOEC chronic fish	0.032 mg/l Pimephales promelas (Fathead minnow)	

12.2. Persistence and degradability

Zap-OX		
No data available.		
Biodegradation is not applicable to inorganic compounds.		
C9-11 PARETH-6 (68439-46-3)		
Readily biodegradable.		
Methyl salicylate (119-36-8)		
Readily biodegradable.		
Pentapotassium bis(peroxymonosulphate) bis(sulphate) (70693-62-8)		
Persistence and degradability Readily biodegradable.		
Alkyl Dimethyl Ethylbenzyl Ammonium Chloride (85409-23-0)		
Readily biodegradable.		

12.3. Bioaccumulative potential

Silicon Dioxide, Quartz (14808-60-7)	
Bioaccumulative potential	Not potentially bioaccumulable.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation : Dispose of in accordance with applicable federal, state, and local regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.



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According to 29CFR 1910.1200 OSHA Hazard Communication Standard

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number	·	
Not regulated	3082	3082
14.2. Proper Shipping Name	·	
Not regulated	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkyl Dimethyl Ethlbenzyl Ammonium Chloride)	Environmentally hazardous substance, liquid, n.o.s. (Alkyl Dimethyl Ethlbenzyl Ammonium Chloride)
14.3. Transport hazard class(es)		
Not regulated	9	9
	<u>e</u>	<u>**</u>
14.4. Packing group		
Not regulated	III	III
14.5. Environmental hazards		
Not regulated	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available		

14.6. Special precautions for user

DOT

Not regulated

IMDG

Special provision (IMDG) : 274, 335, 969

Limited quantities (IMDG) : 5 L

Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : LP01, P001

Packing provisions (IMDG) : PP1

IBC packing instructions (IMDG) : IBC03

Tank instructions (IMDG) : T4

Tank special provisions (IMDG) : TP1, TP29

EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE

EmS-No. (Spillage) : S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS

Stowage category (IMDG) : A

IATA

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L

Special provision (IATA) : A97, A158, A197, A215

ERG code (IATA) : 9L

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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Zap-OX	
SARA Section 311/312 Hazard Classes	Refer to Section 2 for OSHA Hazard Classification.

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Alkyl Dimethyl Ethylbenzyl Ammonium Chloride CAS-No. 85409-23-0 1 - <5%

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

15.3. US State regulations

Zap-OX	
U.S California - Proposition 65 - Other information	Crystalline Silica is inextrictabily bound in the chemical matrix of this product and no exposure can occur.



This product can expose you to Crystalline Silica-Quartz, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
Silicon Dioxide, Quartz(14808-60-7)	U.S New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

According to 29CFR 1910.1200 OSHA Hazard Communication Standard Revision date : 7/3/2024

Full text of hazard classes and H-statements	
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

NFPA health hazard

: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA fire hazard

: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and







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NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire

conditions.

Hazard Rating

: 3 Serious Hazard Health Flammability 0 Minimal Hazard Physical 0 Minimal Hazard

Indication of changes:

Composition/Information on ingredients. Physical and chemical properties. revised edition.

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

end of SDS

