



SAFETY DATA SHEET

Protox HP18

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier Trade name Protox HP18 1.2. Relevant identified uses of the substance or mixture and uses advised against ▼ Relevant identified uses of the substance or mixture Biocide Restricted to professional users. Uses advised against None known. 1.3. Details of the supplier of the safety data sheet Company and address **Restore Solutions** 4 sourris court 4152 Queensland Carina Australia 0411501931 www.restoresolutions.com.au Contact person Garry Carroll E-mail admin@restoresolutions.com.au SDS date 3/1/2024 **SDS Version** 2.0 Date of previous version 20/12/2022 (1.0) 1.4. ▼Emergency telephone number In an emergency call 000 In less severe situations call the Poisons Information Centre: 13 11 26 (Available 24/7 from anywhere in Australia) See section 4 "First aid measures". SECTION 2: Hazards identification

This material is considered hazardous according to the Work Health and Safety Regulations.

2.1. Classification of the substance or mixture

Eye Dam. 1; H318, Causes serious eye damage.

2.2. Label elements Hazard pictogram(s)



Signal word Danger Hazard statement(s) Causes serious eye damage. (H318) Precautionary statement(s) General -Prevention





Wear face protection/protective gloves/protective clothing. (P280)

Response

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

Immediately call a POISON CENTER/doctor. (P310)

Storage

Disposal

Hazardous substances

hydrogen peroxide solution ...% Additional labelling Not applicable.

2.3. Other hazards

▼ Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. ▼ Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
hydrogen peroxide solution %	CAS No.: 7722-84-1 EC No.: 231-765-0	15-25%	Ox. Liq. 1, H271 Acute Tox. 4, H302 Skin Corr. 1A, H314 (SCL: 70.00 %) Skin Corr. 1B, H314 (SCL: 50.00 %) Skin Irrit. 2, H315 (SCL: 35.00 %) Eye Dam. 1, H318 (SCL: 8.00 %) Eye Irrit. 2, H319 (SCL: 5.00 %) Acute Tox. 4, H332 STOT SE 3, H335 (SCL: 35.00 %)	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

▼ Other information

SECTION 4: First aid measures

4.1. ▼ Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – bring the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

▼ Eye contact

If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

▼Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid





inhalation of or choking on vomited material.

Burns

Not applicable.

4.2. Most important symptoms and effects, both acute and delayed

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

4.3. Indication of any immediate medical attention and special treatment needed IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Not applicable.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure call the NSW Poisons Information Centre on 13 11 26 (Available 24/7) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas. Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. Keep unauthorized persons away from the spill

6.3. ▼ Methods and material for containment and cleaning up

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.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid direct contact with the product.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Keep only in original packaging.

Storage temperature

Dry, cool and well ventilated

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection





8.1. ▼ Control parameters

hydrogen peroxide solution ...% Long term exposure limit (8 hours) (ppm): 1 Long term exposure limit (8 hours) (mg/m³): 1.4

Workplace exposure standards for airborne contaminants (Safe Work Australia).

VDNEL

hydrogen peroxide solution%		
Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	210 µg/m³
Long term – Local effects - Workers	Inhalation	1.4 mg/m ³
Short term – Local effects - General population	Inhalation	1.93 mg/m ³
Short term – Local effects - Workers	Inhalation	3 mg/m ³

▼ PNEC

hydrogen peroxide solution ...%

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		12.6 µg/L
Freshwater sediment		47 µg/kg
Intermittent release (freshwater)		13.8 µg/L
Marine water		12.6 µg/L
Marine water sediment		47 µg/kg
Sewage treatment plant		4.66 mg/L
Soil		2.3 µg/kg

8.2. ▼ Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Ensure that eyewash stations and safety showers are located within easy reach.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

▼ Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

▼ Generally

Use only protective equipment that carries the RCM symbol.

Respiratory Equipment

Work situation	Туре	Class	Colour	Standards	
When there is risk of formation of mist/aerosol	Combination filter A2P2	Class 2	Brown/White	EN14387	

Skin protection





Work situation	Recommended	Type/Category	Standards	
When there is risk of splash- / intermittent exposure	Dedicated work clothing should be worn	-	-	R

Hand protection

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
When there is risk of splash- / intermittent exposure	Latex	1,0	> 480	EN374-2, EN374-3, EN388	

Eye protection

Work situation	Туре	Standards
When there is risk of splash- / intermittent exposure	Face shield alternatively safety glasses with side shields.	EN166

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form Liquid Colour Colourless Odour Characteristic Odour threshold (ppm) No data available pН 4,5 Density (g/cm³) 1.06 ▼ Kinematic viscosity Not applicable Phase changes Melting point (°C) No data available Boiling point (°C) No data available Vapour pressure No data available Relative vapour density No data available Decomposition temperature (°C) No data available Evaporation rate (n-butylacetate = 100) No data available Data on fire and explosion hazards Flash point (°C) Not applicable Flammability (°C) No data available Auto-ignition temperature (°C) No data available Explosion limits (% v/v) No data available **Explosive properties** Testing not relevant or not possible due to the nature of the product.





Oxidizing properties Not applicable Solubility Solubility in water Completely soluble n-octanol/water coefficient (LogKow) Not applicable Solubility in fat (g/L) Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

- The product is stable under the conditions, noted in section 7 "Handling and storage".
- 10.3. Possibility of hazardous reactions
- None known.
- 10.4. Conditions to avoid None known.
- 10.5. Incompatible materials
- Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.
- 10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

hydrogen peroxide solution ...% has been classified by IARC as a group 3 carcinogen.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Long term effects

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

SECTION 12: Ecological information

12.1. Toxicity

- No data available.
- 12.2. Persistence and degradability





No data available.
12.3. Bioaccumulative potential
No data available.
12.4. Mobility in soil
No data available.
12.5. Vesults of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Other adverse effects

None known.

SECTION 13: Disposal considerations

▼ Waste treatment methods

▼ Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / II	14.2) UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:	
ADG	-	-	-	-	-	-	
IMDG	-	-	-	-	-	-	
IATA	-	-	-	-	-	-	
* Dacking o	roup						

* Packing group

** Environmental hazards

Additional information

Not dangerous goods according to ADR, IATA and IMDG.

- 14.6. Special precautions for user
- Not applicable.
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code No data available.

SECTION 15: Regulatory information

15.1. ▼ Safety, health and environmental regulations/legislation specific for the substance or mixture

- Restrictions for application
 - Restricted to professional users.
- Demands for specific education
 - No specific requirements.
- Control of major hazard facilities

Flammable Material / Treshold quantity: 200 tonnes

Additional information

Not applicable.

- ▼ The Australian Inventory of Industrial Chemicals (AIIC)
- hydrogen peroxide solution ...% is listed

Sources

National Standard for the Control of Major Hazard Facilities [NOHSC:1014(2002)].

Model Work Health and Safety Regulations as at 1 January 2021.

15.2. Chemical safety assessment

No

SECTION 16: Other information

▼ Full text of H-phrases as mentioned in section 3

H271, May cause fire or explosion; strong oxidiser. H302, Harmful if swallowed.





H314, Causes severe skin burns and eye damage. H315, Causes skin irritation. H318, Causes serious eye damage. H319, Causes serious eye irritation. H332, Harmful if inhaled. H335, May cause respiratory irritation. The full text of identified uses as mentioned in section 1 None known. Abbreviations and acronyms ADG = The Australian Code for the Transport of Dangerous Goods by Road & Rail AICIS = Australian Industrial Chemicals Introduction Scheme AIIC = Australian Inventory of Industrial Chemicals AS = Australian Standard AS/NZS = Australian New Zealand Standard ATE = Acute Toxicity Estimate AUH = Hazard statements specific for Australia BCF = Bioconcentration Factor CAS = Chemical Abstracts Service EINECS = European Inventory of Existing Commercial chemical Substances GHS = Globally Harmonized System of Classification and Labelling of Chemicals Hazchem = Hazardous chemicals IARC = International Agency for Research on Cancer IATA = International Air Transport Association 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) NICNAS = National Industrial Chemicals Notification and Assessment Scheme (replaced by AICIS since 2020) OECD = Organisation for Economic Co-operation and Development PBT = Persistent, Bioaccumulative and Toxic RCM = Regulatory Mark of Conformity RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail SCL = A specific concentration limit STEL = Short-term exposure limits STOT-RE = Specific Target Organ Toxicity - Repeated Exposure STOT-SE = Specific Target Organ Toxicity - Single Exposure SUSMP = Standard for the Uniform Scheduling of Medicines and Poisons TWA = Time weighted average UN = United Nations UVBC = Unknown or variable composition, complex reaction products or of biological materials VOC = Volatile Organic Compound vPvB = Very Persistent and Very Bioaccumulative WHS = Work Health and Safety Regulations Additional information The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by the Work Health and Safety Regulations. The safety data sheet is validated by HMJ Other A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products. It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification. Country-language: AU-en