

## SAFETY DATA SHEET

## Protox Hysan

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

## 1.1. Product identifier

## Trade name

Protox Hysan

## 1.2. Relevant identified uses of the substance or mixture and uses advised against

## Relevant identified uses of the substance or mixture

Biocide

## 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.restoreolutions.com.au

## Contact person

Garry Carroll

## E-mail

admin@restoreolutions.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

## 2.2. Label elements

## Hazard pictogram(s)

Not applicable.

## Signal word

Not applicable.

## Hazard statement(s)

Not applicable.

## Precautionary statement(s)

General

-

Prevention

-

Response

-

Storage

-

## Disposal

-

### Hazardous substances

None known.

#### ▼ Additional labelling

AUH031, Risk of explosion if heated under confinement.

### 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
Sodium chlorite	CAS No.: 7758-19-2 EC No.: 231-836-6	<1%	AUH031 AUH071 Ox. Sol. 1, H271 Acute Tox. 3, H301 (ATE: 238.00 mg/kg) Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT RE 2, H373	

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

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

#### ▼ Eye contact

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance 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

None known.

### 4.3. ▼ Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

#### 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.

Fire fighters should wear appropriate personal protective equipment.

## SECTION 6: Accidental release measures

### 6.1. ▼ Personal precautions, protective equipment and emergency procedures

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

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

Always store in containers of the same material as the original container.

#### 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

No substances are included in the list of workplace exposure standards for airborne contaminants as published by Safe Work Australia.

#### ▼ DNEL

Sodium chlorite

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	400 µg/kgbw/day
Long term – Systemic effects - Workers	Dermal	800 µg/kgbw/day
Short term – Systemic effects - General population	Dermal	400 µg/kgbw/day
Short term – Systemic effects - Workers	Dermal	800 µg/kgbw/day
Long term – Systemic effects - General population	Inhalation	70 µg/m <sup>3</sup>

Conforms to Code of Practice - Preparation of safety data sheets for hazardous chemicals, June 2023.

Long term – Systemic effects - Workers	Inhalation	280 µg/m <sup>3</sup>
Short term – Systemic effects - General population	Inhalation	70 µg/m <sup>3</sup>
Short term – Systemic effects - Workers	Inhalation	280 µg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	40 µg/kgbw/day
Short term – Systemic effects - General population	Oral	40 µg/kgbw/day

▼ PNEC

Sodium chlorite

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		650 ng/L
Intermittent release (freshwater)		6.5 µg/L
Marine water		65 ng/L
Sewage treatment plant		1 mg/L

8.2. ▼ Exposure controls

Control is unnecessary if the product is used as intended.

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

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

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	Type	Class	Colour	Standards	
In the event of prolonged exposure or high concentrations	B	Class 2 (medium capacity)	Gray	EN14387	
When there is risk of formation of mist/aerosol	SL	P3	White	EN149	


Skin protection

Work situation	Recommended	Type/Category	Standards	
In the event of prolonged exposure or high concentrations	Dedicated work clothing should be worn	-	-	

Hand protection

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
In the event of prolonged exposure or high concentrations	Nitrile	-	-	EN374-2	

Eye protection

Work situation	Type	Standards	
Industrial spraying	Wear safety glasses with side shields.	EN166	
When there is risk of splash- / intermittent exposure	Safety glasses	EN166	

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Form

Liquid

#### Colour

Transparent

#### Odour

Characteristic

#### Odour threshold (ppm)

Testing not relevant or not possible due to nature of the product.

#### pH

10,1

#### Density (g/cm<sup>3</sup>)

1.0085

#### ▼ Kinematic viscosity

Testing not relevant or not possible due to nature of the product.

#### Phase changes

##### Melting point (°C)

Not applicable - product is a liquid

##### Boiling point (°C)

100

##### Vapour pressure

0.76 mmHg

##### Relative vapour density

No data available

##### Decomposition temperature (°C)

Testing not relevant or not possible due to nature of the product.

##### Evaporation rate (n-butylacetate = 100)

Testing not relevant or not possible due to nature of the product.

#### Data on fire and explosion hazards

##### Flash point (°C)

Testing not relevant or not possible due to nature of the product.

##### Flammability (°C)

Testing not relevant or not possible due to nature of the product.

##### Auto-ignition temperature (°C)

Testing not relevant or not possible due to nature of the product.

##### Explosion limits (% v/v)

Testing not relevant or not possible due to nature of the product.

##### Explosive properties

Testing not relevant or not possible due to nature of the product.

##### Oxidizing properties

Testing not relevant or not possible due to nature of the product.

#### Solubility

##### Solubility in water

Completely soluble

##### n-octanol/water coefficient (LogKow)

Testing not relevant or not possible due to nature of the product.

##### Solubility in fat (g/L)

Testing not relevant or not possible due to nature of the product.

## 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

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

#### 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.

Sodium chlorite 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

None known.

## 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. ▼ Results 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**

Product is not covered by regulations on dangerous waste.

**▼ 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 / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADG	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

\* 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**

No special.

**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)**

Sodium chlorite 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**

AUH031, Risk of explosion if heated under confinement.

AUH071, Corrosive to the respiratory tract.

H271, May cause fire or explosion; strong oxidiser.

H301, Toxic if swallowed.

H314, Causes severe skin burns and eye damage.

H318, Causes serious eye damage.

H373, May cause damage to organs through prolonged or repeated exposure.

**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

Not applicable.

#### ▼ 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