

SAFETY DATA SHEET

Prottox Activator, HYSAN 5 Ltr

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

1.1. Product identifier

Trade name

Prottox Activator, HYSAN 5 Ltr

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

▼ Relevant identified uses of the substance or mixture

Additive

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

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E-mail

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SDS date

3/1/2024

SDS Version

2.0

Date of previous version

9/2/2023 (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 Irrit. 2; H319, Causes serious eye irritation.

STOT SE 3; H335, May cause respiratory irritation.

2.2. Label elements

Hazard pictogram(s)



Signal word

Warning

Hazard statement(s)

Causes serious eye irritation. (H319)

May cause respiratory irritation. (H335)

Precautionary statement(s)

General

Prevention

- Avoid breathing mist/vapour. (P261)
- Wear eye protection/protective clothing. (P280)

Response

- Call a POISON CENTER/doctor if you feel unwell. (P312)
- If eye irritation persists: Get medical advice/attention. (P337+P313)

Storage

- Store in a well-ventilated place. Keep container tightly closed. (P403+P233)

▼ Disposal

- Dispose of contents/container in accordance with local regulation (P501)

Hazardous substances

citric acid

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
citric acid	CAS No.: 77-92-9 EC No.: 201-069-1	40-60%	Eye Irrit. 2, H319 STOT SE 3, H335	
hydrogen chloride	CAS No.: 7647-01-0 EC No.: 231-595-7	3-5%	Skin Corr. 1B, H314 (SCL: 25.00 %) Skin Irrit. 2, H315 (SCL: 10.00 %) Eye Irrit. 2, H319 (SCL: 10.00 %) STOT SE 3, H335 (SCL: 10.00 %)	

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

▼ Other information

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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 immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. 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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

If eye irritation persists: Get 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.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Halogenated compounds
Carbon oxides (CO / CO₂)

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

Ensure adequate ventilation, especially in confined areas.
Avoid inhalation of vapours from spilled material.
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

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 chloride

Long term exposure limit (8 hours) (ppm): 5 Peak limitation

 Long term exposure limit (8 hours) (mg/m³): 7.5 Peak limitation

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

DNEL

hydrogen chloride

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	8 mg/m ³
Long term – Local effects - Workers	Inhalation	8 mg/m ³
Short term – Local effects - General population	Inhalation	15 mg/m ³
Short term – Local effects - Workers	Inhalation	15 mg/m ³

PNEC

No data available.

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.

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

Type	Class	Colour	Standards
No special when used as intended.			

Skin protection

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


Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
No special when used as intended	-	-	-

Eye protection

Work situation	Type	Standards
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

Colourless

Odour

Mild

Odour threshold (ppm)

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

pH

2

Density (g/cm³)

1.25 (20 °C)

Kinematic viscosity

No data available

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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 - based on structure

Flammability (°C)

Not applicable - based on structure

Auto-ignition temperature (°C)

Not applicable - based on structure

Explosion limits (% v/v)

Not applicable - based on structure

Explosive properties

Not applicable - based on structure

Oxidizing properties

Not applicable - based on structure

Solubility

Solubility in water

Completely soluble

n-octanol/water coefficient (LogKow)

No data available

Solubility in fat (g/L)

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

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

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 irritation.

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 chloride 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

May cause respiratory irritation.

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs.
Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

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

Dispose of contents/container to an approved waste disposal plant.

▼ **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

Restricted to professional users.

Demands for specific education

No specific requirements.

▼ **Control of major hazard facilities**

hydrogen chloride / Treshold quantity: 250 tonnes

Additional information

Not applicable.

▼ **The Australian Inventory of Industrial Chemicals (AIIC)**

citric acid is listed

hydrogen chloride 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**

H314, Causes severe skin burns and eye damage.

H315, Causes skin irritation.

H319, Causes serious eye irritation.

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