

OXILOFRINE HYDROCHLORIDE

National Measurement Institute

Chemwatch: 21-2112

Version No: 3.1.1.1

Material Safety Data Sheet according to NOHSC and ADG requirements

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

Product Identifier

Product name: OXILOFRINE HYDROCHLORIDE
Chemical Name: oxilofrine hydrochloride
Synonyms: Not Available
Proper shipping name: Not Applicable
Chemical formula: C10H15NO2 .ClH
Other means of identification: Not Available
CAS number: 942-51-8

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

Relevant identified uses: Stimulant; sympathomimetic. On Prohibited List World Anti-Doping Code., Chemically r

Details of the supplier of the safety data sheet

Registered company name: National Measurement Institute
Address: 1 Suakin Street Pymble 2073 NSW
 Australia
Telephone: +61 2 9449 0111
Fax: 02 9449 1653
Website: Not Available
Email: info@measurement.gov.au

Emergency telephone number

Association / Organisation: Not Available
Emergency telephone numbers: Not Available
Other emergency telephone numbers: Not Available

SECTION 2 Hazards identification

Classification of the substance or mixture

HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

ChemWatch Hazard Ratings

	Min	Max	
Flammability	1	1	
Toxicity	2	2	0 = Minimum
Body Contact	0	0	1 = Low
Reactivity	1	1	2 = Moderate
Chronic	2	2	3 = High
			4 = Extreme

Poisons Schedule: S4

Risk Phrases^[1]

R22 Harmful if swallowed.

Legend: 1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

Label elements



Relevant risk statements are found in section 2.1

Indication(s) of danger: Xn

Safety advice:

- S01 Keep locked up.
- S07 Keep container tightly closed.
- S09 Keep container in a well ventilated place.
- S13 Keep away from food, drink and animal feeding stuffs.
- S20 When using do not eat or drink.
- S28 After contact with skin, wash immediately with plenty of
- S29 Do not empty into drains.
- S35 This material and its container must be disposed of in a safe way.
- S36 Wear suitable protective clothing.
- S37 Wear suitable gloves.
- S38 In case of insufficient ventilation, wear suitable respiratory equipment.
- S40 To clean the floor and all objects contaminated by this material, use water and detergent.
- S45 In case of accident or if you feel unwell IMMEDIATELY contact Doctor or Poisons Information Centre (show lab
- S46 If swallowed, IMMEDIATELY contact Doctor or Poisons Information Center. (show this container or label).
- S51 Use only in well ventilated areas.
- S53 Avoid exposure - obtain special instructions before use.
- S56 Dispose of this material and its container at hazardous or special waste collection point.

Other hazards

Inhalation may produce health damage*.
Cumulative effects may result following exposure*.

SECTION 3 Composition / information on ingredients

Substances

CAS No	%[weight]	Name
942-51-8	>98	OXILOFRINE HYDROCHLORIDE

Mixtures

See 'Information on ingredients' in section 3.1

SECTION 4 First aid measures

Description of first aid measures

Eye Contact:

If this product comes in contact with the eyes:

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lift
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact:

If skin or hair contact occurs:

- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

Inhalation:

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid proce-
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket ma
- Transport to hospital, or doctor.

Ingestion:

- **IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.**
- For advice, contact a Poisons Information Centre or a doctor.
- Urgent hospital treatment is likely to be needed.
- In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measu
- If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a c
- action will be the responsibility of the medical specialist.
- If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the

Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless

- **INDUCE** vomiting with fingers down the back of the throat, **ONLY IF CONSCIOUS**. Lean patient forward or place on left side
- open airway and prevent aspiration.

NOTE: Wear a protective glove when inducing vomiting by mechanical means.

Indication of any immediate medical attention and special treatment needed

for ephedrine (phenylpropanolamine) intoxication: Overdose management usually involves supportive and symptomatic therapy. In some cases, it may be emptied by aspiration and lavage. Diazepam may be given to control CNS stimulation and convulsions. For marked excitement or hyperreflexia and, in addition, its alpha-adrenoreceptor blocking properties may be useful in the management of hypertension. Severe hypertension may be treated with a blocking agent such as propranolol may be required to control cardiac arrhythmias. MARTINDALE: The Extra Pharmacopoeia, 27th Edition, 1997, p. 1000. Treat symptomatically.

SECTION 5 Firefighting measures

Extinguishing media

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility:

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

Advice for firefighters

Fire Fighting:

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water courses.
- Use water delivered as a fine spray to control fire and cool adjacent area.

Fire/Explosion Hazard:

- Combustible solid which burns but propagates flame with difficulty; it is estimated that most organic dusts are combustible (conditions under which the combustion process occurs, such materials may cause fires and / or dust explosions).
- Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions).
- Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture. A flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; they may burn rapidly and fiercely if ignited - particles exceeding this limit will generally not form flammable dust clouds; once initiated, particles of 10 microns diameter will contribute to the propagation of an explosion.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Minor Spills:

- Clean up waste regularly and abnormal spills immediately.
- Avoid breathing dust and contact with skin and eyes.
- Wear protective clothing, gloves, safety glasses and dust respirator.
- Use dry clean up procedures and avoid generating dust.

Major Spills:

Moderate hazard.

- **CAUTION:** Advise personnel in area.
- Alert Emergency Services and tell them location and nature of hazard.
- Control personal contact by wearing protective clothing.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

SECTION 7 Handling and storage

Precautions for safe handling

Safe handling

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.

Other information

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry area protected from environmental extremes.
- Store away from incompatible materials and foodstuff containers.

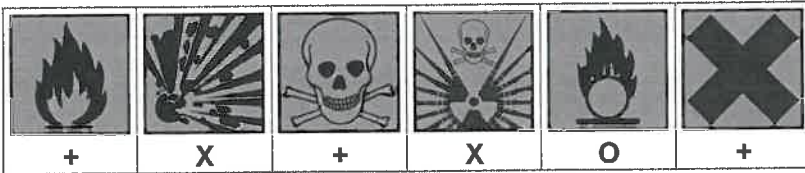
Conditions for safe storage, including any incompatibilities

Suitable container:

- Glass container is suitable for laboratory quantities
- Polyethylene or polypropylene container.
- Check all containers are clearly labelled and free from leaks.

Storage incompatibility:

- Avoid reaction with oxidising agents



X: Must not be stored together

O: May be stored together with specific preventions

+ : May be stored together

Package Material Incompatibilities:

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Not Available

Emergency Limits

Ingredient

OXILOFRINE HYDROCHLORIDE

TEEL-0

Not Available

TEEL-1

Not Available

TEEL-2

Not Available

Ingredient

OXILOFRINE HYDROCHLORIDE

Original IDLH

Not Available

Exposure controls

Appropriate engineering controls

Enclosed local exhaust ventilation is required at points of dust, fume or vapour generation.

HEPA terminated local exhaust ventilation should be considered at point of generation of dust, fumes or vapours.

Barrier protection or laminar flow cabinets should be considered for laboratory scale handling.

A fume hood or vented balance enclosure is recommended for weighing/ transferring quantities exceeding 500 mg

When handling quantities up to 500 gram in either a standard laboratory with general dilution ventilation (e.g. 6-12 air changes per h

Personal protection



Eye and face protection:

When handling very small quantities of the material eye protection may not be required.

For laboratory, larger scale or bulk handling or where regular exposure in an occupational setting occurs:

- Chemical goggles
- Face shield. Full face shield may be required for supplementary but never for primary protection of eyes
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document restrictions on use, should be created for each workplace or task.

Skin protection:

See Hand protection below

Hand protection:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. In the preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be determined. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed. Suitability and durability of glove type is dependent on usage.

Body protection:

See Other protection below

Other protection:

- For quantities up to 500 grams a laboratory coat may be suitable.
- For quantities up to 1 kilogram a disposable laboratory coat or coverall of low permeability is recommended. Coveralls should be worn for quantities over 1 kilogram and manufacturing operations, wear disposable coverall of low permeability and disposable shoes.

Thermal hazards:

Recommended material(s):

Respiratory protection:

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance

White crystalline powder; mixes with water (1:3), glycerol (1:5), ethanol (1:10)

Physical state

Divided Solid

Odour

Not Available

Odour threshold

Not Available

pH (as supplied)

Not Available

Melting point / freezing point (°C)

207

Initial boiling point and boiling range (°C)

Not Available

Flash point (°C)

Not Available

Evaporation rate

Not Available

Flammability

Not Available

Upper Explosive Limit (%)

Not Available

Lower Explosive Limit (%)

Not Available

Vapour pressure (kPa)

Negligible

Solubility in water (g/L)

Partly Miscible

Vapour density (Air = 1)

Not Available

Relative density (Water = 1)

Partition coefficient n-octanol / water

Auto-ignition temperature (°C)

Decomposition temperature

Viscosity (cSt)

Molecular weight (g/mol)

Taste

Explosive properties

Oxidising properties

Surface Tension (dyn/cm or mN/m)

Volatile Component (%vol)

Gas group

pH as a solution(1%)

SECTION 10 Stability and reactivity

Reactivity:

See section 7.2

Chemical stability:

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

Possibility of hazardous reactions:

See section 7.2

Conditions to avoid:

See section 7.2

Incompatible materials:

See section 7.2

Hazardous decomposition products:

See section 5.3

SECTION 11 Toxicological information

Information on toxicological effects

Inhaled:

The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models). Nevertheless prolonged periods, may produce respiratory discomfort and occasionally, distress.

Inhalation of dusts, generated by the material during the course of normal handling, may be damaging to the health of the individual. Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further particulate are inhaled.

ingestion:

Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal on the individual.

Ephedrine (phenylpropanolamine) and its derivatives mimic adrenaline, and may produce severe high blood pressure if ingested. Large doses may sweating, thirst, rapid heart beat, itchiness, pain in the front of the chest, palpitations, difficulty in urinating, muscle weakness and tremors, restless Sympathomimetics, which mimic stimulation of the sympathetic nerves, cause a stimulatory effect on the heart and central nervous system; the skin and mucous membranes, dilation of blood vessels supplying muscles of movement, and widening of the airways.

Skin Contact:

Skin contact is not thought to produce harmful health effects (as classified under EC Directives using animal models). Systemic exposure of animals by at least one other route and the material may still produce health damage following entry through wounds, i.e. Open cuts, abraded or irritated skin should not be exposed to this material

Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine and ensure that any external damage is suitably protected.

Eye:

Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may cause transient conjunctival redness (as with windburn). Slight abrasive damage may also result.

Chronic:

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational Prolonged administration of ephedrine and its derivatives is not thought to produce cumulative effects, although tolerance with depe exposed to ephedrine may experience difficulty sleeping, tension, anxiety and jerky/irregular involuntary movements. Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less the lung.

TOXICITY

oxilofrine hydrochloride

Not Available

IRRITATION

Not Available

* Value obtained from manufacturer's msds unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances

OXILOFRINE HYDROCHLORIDE

No significant acute toxicological data identified in literature search.

Acute Toxicity:	Acute Toxicity (Oral) Category 4
Skin Irritation/Corrosion:	Not Available
Serious Eye Damage/Irritation:	Not Available
Respiratory or Skin sensitisation:	Not Available
Mutagenicity:	Not Available

Carcinogenicity:
Reproductivity:
STOT - Single Expos
STOT - Repeated Exp
Aspiration Hazard:

CMR STATUS

SECTION 12 Ecological information

Toxicity

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil
Not Available	Not Available

Persisten
Not Avail

Bioaccumulative potential

Ingredient	Bioaccumulation
Not Available	Not Available

Mobility in soil

Ingredient	Mobility
Not Available	Not Available

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal:

- Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.

Otherwise:

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to st containers, to prevent re-use, and bury at an authorised landfill.
- Where possible retain label warnings and MSDS and observe all notices pertaining to the product.

SECTION 14 Transport information

Labels Required:

Marine Pollutant: NO

HAZCHEM:

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 Regulatory information

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

oxilofrine hydrochloride(942-51-8) is found on the following regulatory lists

"Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4"

SECTION 16 Other information

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and curr considered.

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