



Material Safety Data Sheet

• **1 Identification of substance:**

• **Product name:** HOUGH INHIBITOR 3344

• **Stock number:** 262235

• **Manufacturer/Supplier:**

PPS Industries Limited
86 Hugo Johnston Drive,
Penrose,
Auckland, New Zealand
P.O.Box 12-823, Penrose, Auckland 1642
Phone: 64 9 579-1001
Facsimile: 64 9 579-9474
Emergency Phone: 0800 657 894 Monday to Friday 8am-4pm
Web Site: www.ppsindustries.co.nz

• **Emergency contact detail:**

For emergency only. During normal hours call PPS Industries office.

Organization	Location	Phone
National POSION CENTER	New Zealand	0800 647-766
Chemcall 24/7 Emergency Response Service	New Zealand	0800 243-6225

• **2 Hazards identification**

Classified as hazardous according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
Classified as a Dangerous Goods according to NZS 5433.

• **Hazard description:** Class 6.1, TOXIC, ORGANIC, N.O.S., Packing Group III, UN 2810

• **HSNO Class:**

Class 6 Toxicity

6.1D (oral)	Acutely Toxic.
6.3A	Substances that is irritating to the skin.
6.5B	Substances that are contact sensitizers

Class 8 Corrosive

8.3A Corrosive to ocular tissue.

• **EPA Group Standard:** SHR002503

GHS Classification:

Hazard Pictogram:





Signal word: Danger

Hazard class:

Acute Toxicity: Oral Category 4
serious eye damage/eye irritation Category 1
Skin Sensitization category 1
Skin corrosion/irritation category 2

Hazard statement(s):

H302 Harmful if swallowed
H317 May cause an Allergic skin reaction

H315 Causes skin irritation
H318 Causes serious eye damage

Precautionary Statement(s) Prevention:

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children
P103 read labels before use.
P264 Wash the hands and other exposed parts of the body, thoroughly after Handling.
P270 Do not eat, drink or smoke when using this product.
P264 Wash the affected body parts thoroughly after handling
P280 Wear protective gloves/protective clothing/eye protection/face protection
P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P272 Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statement(S) Response:

P301+P310 If swallowed: Immediately call poison centre or doctor. Rinse mouth With water.
P302+P352 If on skin: wash with plenty of water
P321 For specific treatment read the Label.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing
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.
P302+P352 IF ON SKIN: wash with plenty of water.
P333+P313 IF SKIN irritation or rash occurs: get medical advice/attention.
P321 For specific treatment Read the Label.
P363 Wash contaminated clothing before reuse.

Precautionary Statement(S) Storage:

Nil

Precautionary Statement(S) Disposal:

P501 Dispose of contents/container to an appropriate treatment and disposal Facility in accordance with applicable laws and regulations.

• **3 Composition/Data on components:**



- **Chemical characterization:**

<u>Description:</u>	<u>(CAS#)</u>	<u>Concentration</u>
1,3,5-Triazine-1,3,5 (2H,4H,6H)-triethanol	4719-04-4	50-95% W/W
Sodium pyridithione	3811-73-2	2.5-10% W/W
Ethanolamine	141-43-5	<2.5% W/W

- **4 First aid measures**

- **After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

- **After skin contact**

Wipe off any excess material from skin and then immediately flush skin with large amounts of soapy water. Remove contaminated clothing and shoes. Wash clothing before re-use. Get medical attention if needed.

- **After eye contact**

Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing**

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

- **5 Fire fighting measures**

Fire:

Not considered to be a fire hazard.

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire. Water may be used to cool containers and to knock down vapours in a fire situation. Do not use water on material itself or allow water to get inside container.

Special Information:

In the event of a fire, wear full protective clothing and OSH-approved self-contained breathing apparatus with full-face mask operated in the pressure demand or other positive pressure mode.

- **6 Accidental release measures**

- **Personal-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources

- **Measures for environmental protection:**

Do not allow material to be released to the environment without proper governmental permits.

- **Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Keep away from ignition sources.

- **Additional information:**

See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

- **7 Handling and storage**



- **Handling**
Information for safe handling:
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation at the workplace.

- **Storage**
Requirements to be met by storerooms and receptacles:
Store in a cool location.
Information about storage in one common storage facility:
Do not store together with oxidizing materials.
Store away from water/moisture.
Further information about storage conditions:
Protect from humidity and water.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

• **8 Exposure controls and personal protection**

- **Personal protective equipment**
Ventilation System:
A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
- **General protective and hygienic measures**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
- **Breathing equipment:**
Use suitable respirator when high concentrations are present.
- **Eye protection:** Use chemical safety goggles and/or full-face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.
- **Skin protection:** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

• **9 Physical and chemical properties:**

- **General Information**
 - **Form:** Liquid
 - **Colour:** Yellowish
 - **Odour:** Amine-like
 - **pH (100 g/l) at 20 °C** 11.5 ± 0.5
 - **Change in condition**
 - **Boiling point/Boiling range:** > 100 °C
 - **Sublimation temperature / start:** Not determined
 - **Flash point:** > 100 °C (DIN 51 758)
 - **Flammability (solid, gaseous)** Product is not self-igniting
 - **Danger of explosion** Product is not explosive
 - **Density:** 1.138 - 1.148 g/cm³ (at 20 °C)



• **10 Stability and reactivity**

• **10.1 Reactivity**

Up to now, no dangers resulting from a reactivity of the mixture have been identified.

• **10.2 Chemical stability**

• **Conditions to be avoided:** Protect against temperatures > 80 °C.

• **Minimum shelf life:** 18 months from production date.

• **10.3 Possibility of hazardous reactions** Reacts with acids

• **10.4 Conditions to avoid** No further relevant information available.

• **10.5 Incompatible materials:** Acids

• **10.6 Hazardous decomposition products:**

None, if storage and handling is done according to specification.

• **11 Toxicological information**

Information on toxicological effects

- Acute toxicity:

• **LD/LC50 values that are relevant for classification:**

Oral	ATE mix	1200 mg/kg (calculated)
Dermal	ATE mix	4140 mg/kg (calculated)
Inhalation	ATE mix dust/mist	0.46 mg/l, 4h (calculated)

• **Primary irritant effect:**

• **on the skin:** Causes skin irritation (Assessment outlined in Annex I, CLP 1272/2008/EC).

• **on the eye:** Causes serious eye irritation (Assessment outlined in Annex I, CLP 1272/2008/EC).

• **Sensitisation:** Sensitization possible by skin contact.

• **12 Ecological information:**

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12.1 Toxicity

• **Aquatic toxicity:**

4719-04-4 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol

EC50 / 48 h	11.9 mg/l (Daphnia)
EC50 / 72 h	6.66 mg/l (Desmodesmus subspicatus)
LC50 / 96 h	16.07 mg/l (Brachydanio rerio)

3811-73-2 pyridine-2-thiol 1-oxide, sodium salt

EC50 / 48 h	0.022 mg/l (Daphnia) literature
EC50 / 72 h	0.46 mg/l (Selenastrum capricornutum) literature
LC50 / 96 h	0.0066 mg/l (rainbow trout) S 3495



12.2 Persistence and degradability

Biodegradability:	
4719-04-4 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	
OECD 301 A DOC Die-Away-Test	> 70 % (Activated Sludge) (OECD 301 A) DOC removal

Evaluation: The component(s) is (are) rapidly biodegradable.

Evaluation: The substance is biodegradable in activated sludge units.

12.3 Bioaccumulative potential

log Kow: -2; HHT

log Kow: -0.24; Natriumpyrithion

Behaviour in environmental systems:

Evaluation: Not worth-mentioning accumulating in organisms

12.4 Mobility in soil No further relevant information available.

Additional ecological information:

COD-value: 1075 mg O₂/g product

AOX-indication:

The product does not contain substances, which can influence the AOX of waste water.

Heavy metals and their compounds according to Directive 2006/11/EC: None

General notes:

Avoid transfer into the environment.

Sewages that contain this product may not be released into the aquatic environment without preliminary treatments (biological purification plant).

12.5 Results of PBT and vPvB assessment

PBT: This mixture does not contain substances that meet the PBT-criteria of REACH, annex XIII.

vPvB: This mixture does not contain substances that meet the vPvB-criteria of REACH, annex XIII.

12.6 Other adverse effects Any other adverse effects on the environment are not expected.

• **13 Disposal considerations**

• **Product:**

• **Recommendation**

Whatever cannot be saved for recovery or recycling should be managed in an appropriate. Consult local or national regulations to ensure proper disposal.

• **Uncleaned packagings:**

• **Recommendation:**

Disposal must be made according to official regulations.

• **14 Transport information**

• **Land transport regulations:**

• **Hazard class:** 6.1

• **Identification number:** UN2810

• **Packing group:** III

• **Hazchem:** 2X



- **Proper shipping name (technical name):**
TOXIC, ORGANIC, N.O.S.

- **15 Regulations**

- **Hazard description:** Class 6.1, TOXIC, ORGANIC, N.O.S., Packing Group III, UN 2810
- **HSNO Class:**
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 - 6.1D (oral) Acutely Toxic.
 - 6.3A Substances that is irritating to the skin.
 - 6.5B Substances that are contact sensitizers
 - Class 8 Corrosive**
 - 8.3A Corrosive to ocular tissue.
- **EPA Group Standard:** SHR002503
- **Certified Handler** : Not Applicable
- **Tracking** : Not Applicable

- **16 Other information:**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

- **Issue date:** 13/09/2021
- **Review date:** 13/09/2026