

- 8.3A - Substance that is corrosive to ocular tissue.
- 9.1C - Substance that is ecotoxic in the aquatic environment.
- 9.2B - Substance that is ecotoxic in the soil environment.
- 9.3C - Substance that is toxic to terrestrial vertebrates.

Hazard statement code:

- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H332 Harmful if inhaled.
- H317 May cause an allergic skin reaction.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H412 Harmful to aquatic life with long lasting effects.
- H422 Toxic to the soil environment.
- H433 Harmful to terrestrial vertebrates.

Precautionary statement codes- prevention:

- P102 Keep out of reach of children. - This statement applies only where the substance is available to the general public.
- P103 Read label before use. - This statement applies only where the substance is available to the general public.
- P104 Read Safety Data Sheet before use.
- P260 Do not breathe mist/vapours/spray.
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment. - This statement does not apply where this is the intended use.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement codes- Response:

- P101 If medical advice is needed, have product container or label at hand. - This statement applies only where the substance is available to the general public.
- P391 Collect spillage.

INHALATION:

- P304+P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
- P312 Call a POISON CENTRE or doctor/physician if you feel unwell.
- P331 Do NOT induce vomiting.

INGESTION:

- P301+P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
- P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

SKIN:

- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P363 Wash contaminated clothing before reuse.
- P310 Immediately call a POISON CENTRE or doctor/physician.

EYES:

- 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 CENTRE or doctor/physician.

Precautionary statement codes - Storage:

- P405 Store locked up.

Precautionary statement codes - Disposal:

- P501 *In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.

Risk Phrase(s)

- R34 Causes burns.
- R43 May cause sensitization by skin contact.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

Safety Phrase(s)

- S23 Do not breathe gas/fumes/vapour/spray
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

S45 In case of accident or if you feel unwell seek medical advice immediately
S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

S24/25 Avoid contact with skin and eyes.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	EINECS	Proportion
Isophorone diamine	2855-13-2	220-666-60-100	%
		8	
Benzyl Alcohol	100-51-6	202-859-10-30	%
		9	
1,5-pentanediamine, 2-methyl	15520-10-2	239-556-10-30	%
Ingredients determined not to be hazardous.		6	(Balance)

4. FIRST AID MEASURES

Inhalation

If inhaled, remove from contaminated area. Apply artificial respiration if not breathing. Seek IMMEDIATE medical attention.

Ingestion

Do NOT induce vomiting. Wash out mouth with water. Seek IMMEDIATE medical attention.

Skin

Wash affected area thoroughly with soap and water. Remove contaminated clothing and wash before reuse or discard. Seek IMMEDIATE medical attention.

Eye

If contact with the eye(s) occurs, wash with copious amounts of water holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. Seek IMMEDIATE medical attention.

First Aid Facilities

Eye wash station, safety shower and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice, contact a Poisons Information Centre (Phone eg Australia 131 126; New Zealand 0800 764 766) or a doctor (at once).

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Water spray, carbon dioxide, foam or dry powder.

Hazards from Combustion Products

Combustion may produce Carbon monoxide, carbon dioxide, oxides of nitrogen, ammonia, amines, fumes and smoke.

Specific Hazards

Combustible liquid. This product will burn if exposed to fire.

Hazchem Code

2X

Precautions in connection with Fire

Fire-fighters should wear full protective clothing and self contained breathing apparatus (SCBA) operated in positive pressure mode. Water spray may be used to keep fire exposed containers cool.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water authorities and EPA in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Corrosive liquid. Attacks skin and eyes. May produce severe burns. Wear suitable protective clothing, gloves and eye/face protection when mixing and using. Use in designated areas with adequate ventilation. Avoid breathing in vapours, mist or fumes. Keep containers closed when not in use. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands after handling, and before eating, drinking, smoking or using the toilet facilities.

Conditions for Safe Storage

Store in a cool dry well-ventilated area. Store away from oxidising agents and bases/acids. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Provide a catch-tank in a bunded area. Store in original packages as approved by manufacturer. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. For information on the design of the storeroom, reference should be made to Australian Standard AS 3780-1994 The storage and handling of corrosive substances. Reference should also be made to all State and Federal regulations.

Storage Regulations

Classified as a (COMBUSTIBLE LIQUID) for the purposes of storage and handling, in accordance with the requirements of AS1940. This product should be stored and used in a well ventilated area away from naked flames, sparks and other sources of ignition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards

No exposure standards have been established for this material by the Australian National Occupational Health & Safety Commission (NOHSC) or the Occupational Safety and Health Service (OSH) of the New Zealand Department of Labour. However, as with all chemicals, exposure should be kept to the lowest possible levels.

Biological Limit Values

No biological limit allocated.

Engineering Controls

Provide sufficient ventilation. Where vapours or mists are generated, a local exhaust ventilation system, drawing vapours/mists away from workers breathing zone, should be used.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapour/mist filter should be used. Reference should be made to Australian/New Zealand Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection

Safety glasses with side shields, goggles or full-face shield as appropriate recommended. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material such as PVC or nitrile rubber gloves. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist. Industrial clothing should conform to the specifications detailed in AS/NZS 2919: Industrial clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Amber liquid.

Odour

Amine odour.

Melting Point

Not available

Boiling Point

> 200°C

Solubility in Water

Insoluble

Specific Gravity

1.00 - 1.03

pH Value

Not applicable.

Vapour Pressure

Not available.

Vapour Density (Air=1)

Not available.

Flash Point

112°C

Flammability

Combustible liquid.

Auto-Ignition Temperature

Not available.

Flammable Limits - Lower
Not available.

Flammable Limits - Upper
Not available.

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions of storage and handling.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Strong oxidising agents, acids, bases and epoxies.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide, oxides of nitrogen, ammonia, amines, fumes and smoke.

Hazardous Reactions

Will react with strong acids to produce heat.

Hazardous Polymerization

Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

Acute toxicity:

For Isophorone diamine:

LD50 Oral (rat): 1990 mg/kg.

For benzyl alcohol:

LD50 Oral (rat): 1230-1660 mg/kg

Inhalation

Harmful by inhalation. Inhalation of mists or vapours will result in respiratory irritation and possible harmful corrosive effects including lesions of the nasal septum, pulmonary edema, pneumonitis and emphysema.

Ingestion

Harmful if swallowed. Ingestion of this product may cause nausea, vomiting, abdominal pain and chemical burns to the mouth, throat and stomach.

Skin

Harmful in contact with skin. Corrosive to skin. Skin contact will cause redness, itching, irritation, severe pain and chemical burns with resultant tissue destruction. This product may cause sensitisation in some individuals.

Eye

Causes burns. Eye contact will cause stinging, blurring, tearing, severe pain and possible permanent corneal damage.

Chronic Effects

Allergic response and dermatitis or asthma like symptoms may occur after a single significant exposure, and sensitisation may occur on a single exposure, or multiple minor exposures.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence / Degradability

Not available

Mobility

Not available

Environ. Protection Do not allow product to enter drains, waterways or sewers.

13. DISPOSAL CONSIDERATIONS

Disposal Considerations

Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure conformity with all applicable regulations.

14. TRANSPORT INFORMATION

Transport Information

Australia:

This material is classified as a Class 8 (Corrosive) Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. Dangerous goods of Class 8 (Corrosive) are incompatible in a placard load with any of the following:

- Class 1, Explosive
 - Class 4.3, Dangerous When Wet Substance
 - Class 5.1, Oxidising Agent
 - Class 5.2, Organic Peroxide
 - Class 6, Toxic and Infectious Substances, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids
 - Class 7, Radioactive Substance
- and are incompatible with food and food packaging in any quantity.

New Zealand:

This material is classified as a Class 8 - Corrosive Substance according to NZS 5433:2007 Transport of Dangerous Goods on Land.

Must not be loaded in the same freight container or on the same vehicle with:

- Class 1, Explosives
- Class 5.1, Oxidising substances
- Class 5.2, Organic peroxides
- Class 7, Radioactive materials unless specifically exempted

And are incompatible with food and food packaging in any quantity.

Note 1; Cyanides (Class 6.1) must not be loaded in the same freight container or on the same vehicle with acids (Class 8).

Note 2; Strong acids must not be loaded in the same freight container or on the same vehicle with strong alkalis. Packing Group I and II acids and alkalis should be considered as strong.

Must not be loaded with in the same freight container; and on the same vehicle must be separated horizontally by at least 3 metres unless all but one are packed in separate freight containers with:

- Class 4.3, Dangerous when wet substances
- Goods of packing group II or III may be loaded in the same freight container or on the same vehicle if transported in segregation devices with:
- Class 4.3, Dangerous when wet substances
 - Class 5.1, Oxidising substances
 - Class 5.2, Organic peroxides
- And are incompatible with food and food packaging in any quantity.

U.N. Number

1760

Proper Shipping Name

CORROSIVE LIQUID, N.O.S. - (CONTAINS ISOPHORONE DIAMINE)

DG Class

8

Hazchem Code

2X

Packing Group

III

IERG Number

37

15. REGULATORY INFORMATION

Regulatory Information

Australia:

Classified as hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC).

Classified as a Scheduled Poison S5 according to the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

Poisons Schedule

S5

National and or International Regulatory Information

New Zealand:

Classified as Hazardous according to the Hazardous Substances (Classification) Regulations 2001.

Group standard:

Additives, Process Chemicals and Raw Materials (Corrosive) Group Standard 2006 HSN0 Approval Number HSR002491.

Hazard Category

Harmful, Corrosive, Dangerous for the environment, Sensitising

16. OTHER INFORMATION

Date of preparation or last revision of MSDS

MSDS Reviewed: May 2009

MSDS created: June 2004

Contact Person/Point

Paul Verren For specialist advice in emergencies: Australia 1800 022 037; New Zealand 0800 154 666.

IMPORTANT ADVICE: This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact Nuplex Industries (Aust) Pty Ltd. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

NUPLEX MSDS WARNING: Nuplex Group (Nuplex) is aware that third parties are distributing documents purporting to be MSDSs (or the like) in relation to Nuplex products without any authorisation from Nuplex (Unauthorised MSDS). Nuplex accepts no responsibility for the distribution of an Unauthorised MSDS by a third party. All Nuplex products must be used in accordance with the corresponding original MSDS authorised by Nuplex for use with that Nuplex product (Authorised MSDS). In the event a Nuplex product is used without the Authorised MSDS and/or with an Unauthorised MSDS, Nuplex hereby excludes absolutely and to the maximum extent permitted by law all liability whatsoever and howsoever arising for all loss and/or damage including but not limited to for personal injury, sickness and death, damage

to real property and chattels and direct and indirect consequential loss and loss of profits.

End of MSDS
