

Safety Data Sheet



1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: **SELLEYS EPOXY FIX SUPER STEEL - PART A**

Synonyms

SELLEYS EPOXY FIX SUPER STEEL - PART A, 7.5mL
SELLEYS EPOXY FIX SUPER STEEL - PART A, 10mL
SELLEYS EPOXY FIX SUPER STEEL - PART A, 17.5mL

Product Code

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Bar Code

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Recommended use: Adhesive.

Supplier: Nippon Paint (Singapore) Co. Pte Ltd
Street Address: 1 First Lok Yang Road, Jurong
Singapore 629728
Telephone: +65 6265 5355

Emergency Telephone number: +613 9663 2130

2. HAZARDS IDENTIFICATION

This material is classified as hazardous according to Singapore Standard SS 586: 2014.



Signal Word
Warning

Hazard Classifications

Skin Corrosion/Irritation - Category 2
Eye Damage/Irritation - Category 2A
Sensitisation - Skin - Category 1
Chronic Hazard to the Aquatic Environment - Category 2

Hazard Statements

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

Prevention Precautionary Statements

P102 Keep out of reach of children.
P103 Read carefully and follow all instructions.
P261 Avoid breathing fume, gas, mist, vapours or spray.
P264 Wash hands, face and all exposed skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing including eye/face protection.

Response Precautionary Statements

Product Name: SELLEYS EPOXY FIX SUPER STEEL - PART A

Reference No: SELSGPEN001241

Issued: 2022-08-26

Version: 2.0

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P101 If medical advice is needed, have product container or label at hand.
P302+P352 IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse
P391 Collect spillage.

Storage Precautionary Statement

Not allocated

Disposal Precautionary Statement

P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

DANGEROUS GOOD CLASSIFICATION

Classified as Dangerous Goods by the criteria of the United Nations "Recommendations on the Transport of Dangerous Goods."

Dangerous Goods Class: 9

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-Oxirane, mono[(C12-14-alkyloxy)methyl] derivatives	1675-54-3 68609-97-2	30 - 50 % (w/w) 1 - 10 % (w/w)
Ingredients determined to be Non-Hazardous	-	Balance
		100%

4. FIRST AID MEASURES

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin Contact: Effects may be delayed. If skin or hair contact occurs, immediately remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre or a Doctor; or for 15 minutes and transport to Doctor or Hospital.

Eye contact: If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a Doctor; or for at least 15 minutes and transport to Doctor or Hospital.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

PPE for First Aiders: Wear safety shoes, overalls, gloves, chemical goggles. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before

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smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically. Effects may be delayed.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: If material is involved in a fire use alcohol resistant foam or dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Combustible material.

Fire fighting further advice: On burning or decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion or decomposition.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Dangerous Goods - Initial Emergency Response Guide No: 47

7. HANDLING AND STORAGE

Handling: Avoid eye contact and skin contact. Avoid inhalation of dust.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Keep container standing upright. Keep containers closed when not in use - check regularly for spills.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits: No value assigned for this specific material by the Workplace Safety and Health (General Provisions) Regulations, 2006.

Medical Examinations: As per the Workplace Health and Safety Guidelines – Statutory Medical Examinations, 2011 the ingredients in this material do not have an allocated Statutory Medical Examination.

Engineering Measures: Natural ventilation should be adequate under normal use conditions.

Personal Protection Equipment: SAFETY SHOES, OVERALLS, GLOVES, CHEMICAL GOGGLES.

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Wear safety shoes, overalls, gloves, chemical goggles. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of dust. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Paste
Colour: Black
Odour: Mild epoxy

Solubility:	Immiscible in water
Density:	1.78 g/mL
Relative Vapour Density (air=1):	N Av
Vapour Pressure:	N Av
Flash Point (°C):	>150
Flammability Limits (%):	N Av
Autoignition Temperature (°C):	N Av
Melting Point/Range (°C):	N Av
Boiling Point/Range (°C):	>200
pH:	N Av
Viscosity:	800,000 - 1,200,000 cP
Total VOC (g/Litre):	N Av

(Typical values only - consult specification sheet)
N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: This material is thermally stable when stored and used as directed.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Strong acids and bases.

Hazardous decomposition products: Oxides of carbon and nitrogen, smoke and other toxic fumes.

Hazardous reactions: No known hazardous reactions.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

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Inhalation: Material may be an irritant to mucous membranes and respiratory tract.

Skin contact: Contact with skin will result in irritation. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

Ingestion: Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

Eye contact: An eye irritant. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.

Acute toxicity

Inhalation: This material has been classified as not hazardous for acute inhalation exposure. Acute toxicity estimate (based on ingredients): $LC_{50} > 5.0$ mg/L for dust.

Skin contact: This material has been classified as not hazardous for acute dermal exposure. Acute toxicity estimate (based on ingredients): $LD_{50} > 2,000$ mg/Kg bw

Ingestion: This material has been classified as not hazardous for acute ingestion exposure. Acute toxicity estimate (based on ingredients): $LD_{50} > 2,000$ mg/Kg bw

Corrosion/Irritancy: Eye: this material has been classified as a Category 2A Hazard (reversible effects to eyes). Skin: this material has been classified as a Category 2 Hazard (reversible effects to skin).

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as a Category 1 Hazard (skin sensitiser).

Aspiration hazard: This material has been classified as not an aspiration hazard.

Specific target organ toxicity (single exposure): This material has been classified as not a specific hazard to target organs by a single exposure.

Chronic Toxicity

Mutagenicity: This material has been classified as not a mutagen.

Carcinogenicity: This material has been classified as not a carcinogen.

Reproductive toxicity (including via lactation): This material has been classified as not a reproductive toxicant.

Specific target organ toxicity (repeat exposure): This material has been classified as not a specific hazard to target organs by repeat exposure.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as not hazardous for acute aquatic exposure. Acute toxicity estimate (based on ingredients): > 100 mg/L

Long-term aquatic hazard: This material has been classified as a Category Chronic 2 Hazard. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): 1 - 10 mg/L, where the substance is not rapidly degradable and/or $BCF \geq 500$ and/or $\log K_{ow} \geq 4$.

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Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the United Nations "Recommendations on the Transport of Dangerous Goods."



UN No: 3082
Dangerous Goods Class: 9
Packing Group: III
Emergency Response Guide No: 47
Limited Quantities 5 L

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (OXIRANE, 2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BIS-)

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1). Note 1: Materials that are fire risks are incompatible with oxidising agents (Class 5.1) or organic peroxides (Class 5.2). Exemptions may apply.

MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea. This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.



UN No: 3082
Dangerous Goods Class: 9

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Packing Group: III

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (OXIRANE, 2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BIS-)

AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.



UN No: 3082
Dangerous Goods Class: 9
Packing Group: III

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (OXIRANE, 2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BIS-)

15. REGULATORY INFORMATION

This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)
The Stockholm Convention (Persistent Organic Pollutants)
The Rotterdam Convention (Prior Informed Consent)

This material is subject to the following international agreements:

Basel Convention (Hazardous Waste)

- Wastes from production, formulation and use of resins, latex, plasticizers, glues/adhesives

International Convention for the Prevention of Pollution from Ships (MARPOL)

- Annex III - Harmful Substances carried in Packaged Form

This material/constituent(s) is covered by the following requirements:

- Maritime and Port Authority of Singapore (Dangerous Goods, Petroleum and Explosives) Regulations
- Workplace Safety and Health (General Provisions) Regulations

16. OTHER INFORMATION

Reason for issue: Revised

This Safety Data Sheet has been prepared by Chemical Data Services Pty Ltd (chemdata.com.au) on behalf of its client.

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

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This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since the company cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.

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1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: SELLEYS EPOXY FIX SUPER STEEL - PART B

Synonyms

SELLEYS EPOXY FIX SUPER STEEL - PART B, 7.5mL
SELLEYS EPOXY FIX SUPER STEEL - PART B, 10mL
SELLEYS EPOXY FIX SUPER STEEL - PART B, 17.5mL

Product Code

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Bar Code

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Recommended use: Adhesive.

Supplier: Nippon Paint (Singapore) Co. Pte Ltd
Street Address: 1 First Lok Yang Road, Jurong
Singapore 629728
Telephone: +65 6265 5355

Emergency Telephone number: +613 9663 2130

2. HAZARDS IDENTIFICATION

This material is classified as hazardous according to Singapore Standard SS 586: 2014.



Signal Word
Danger

Hazard Classifications

Skin Corrosion/Irritation - Category 1C
Eye Damage/Irritation - Category 1
Sensitisation - Skin - Category 1
Specific Target Organ Toxicity (Repeated Exposure) - Category 2

Hazard Statements

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H373 May cause damage to organs through prolonged or repeated exposure.

Prevention Precautionary Statements

P102 Keep out of reach of children.
P103 Read carefully and follow all instructions.
P260 Do not breathe dust, fume, gas, mist, vapours or spray.
P264 Wash hands, face and all exposed skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing including eye/face protection.

Response Precautionary Statements

P101 If medical advice is needed, have product container or label at hand.

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P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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/doctor.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse
P363 Wash contaminated clothing before reuse.

Storage Precautionary Statement

P405 Store locked up.

Disposal Precautionary Statement

P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

DANGEROUS GOOD CLASSIFICATION

Classified as Dangerous Goods by the criteria of the United Nations "Recommendations on the Transport of Dangerous Goods."

Dangerous Goods Class: 8

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether	72244-98-5	10 - 30 % (w/w)
Phenol, styrenated	61788-44-1	1 - 10 % (w/w)
2,4,6-Tri(dimethylaminomethyl)phenol	90-72-2	1 - 10 % (w/w)
Benzyl alcohol	100-51-6	1 - 10 % (w/w)
1-Piperazineethanamine	140-31-8	1 -< 3 % (w/w)
Ingredients determined to be Non-Hazardous	-	Balance
		100%

4. FIRST AID MEASURES

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin Contact: Effects may be delayed. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance. For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

Eye contact: Immediately irrigate with copious quantities of water for 15 minutes. Eyelids to be held open.

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Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

PPE for First Aiders: Wear safety shoes, overalls, gloves, chemical goggles. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically. Effects may be delayed. Can cause corneal burns.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Combustible material.

Fire fighting further advice: On burning or decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion or decomposition.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Dangerous Goods - Initial Emergency Response Guide No: 37

7. HANDLING AND STORAGE

Handling: Avoid eye contact and skin contact. Avoid inhalation of dust.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Store locked up. Keep container standing upright. Keep containers closed when not in use - check regularly for spills.

This material is classified as a Class 8 Corrosive as per the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and/or the "New Zealand NZS5433: Transport of Dangerous Goods on Land"

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and must be stored in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits: No value assigned for this specific material by the Workplace Safety and Health (General Provisions) Regulations, 2006.

Medical Examinations: As per the Workplace Health and Safety Guidelines – Statutory Medical Examinations, 2011 the ingredients in this material do not have an allocated Statutory Medical Examination.

Engineering Measures: Natural ventilation should be adequate under normal use conditions.

Personal Protection Equipment: SAFETY SHOES, OVERALLS, GLOVES, CHEMICAL GOGGLES.

Wear safety shoes, overalls, gloves, chemical goggles. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of dust. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Paste
Colour:	Off-white
Odour:	Sulphur
Solubility:	Immiscible in water
Specific Gravity:	1.74
Density:	1.78 g/mL
Relative Vapour Density (air=1):	>1
Vapour Pressure:	N Av
Flash Point (°C):	N Av
Flammability Limits (%):	N Av
Autoignition Temperature (°C):	N Av
Melting Point/Range (°C):	N Av
Boiling Point/Range (°C):	N Av
pH:	N App
Viscosity:	200,000 - 350,000 cP
Total VOC (g/Litre):	N Av

(Typical values only - consult specification sheet)

N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: This material is thermally stable when stored and used as directed.

Conditions to avoid: Elevated temperatures and sources of ignition.

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Incompatible materials: Oxidising agents, strong acids and bases.

Hazardous decomposition products: Oxides of carbon, nitrogen and sulphur, smoke and other toxic fumes.

Hazardous reactions: No known hazardous reactions.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation: Material may be an irritant to mucous membranes and respiratory tract.

Skin contact: Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

Ingestion: Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.

Eye contact: A severe eye irritant. Corrosive to eyes: contact can cause corneal burns. Contamination of eyes can result in permanent injury. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.

Acute toxicity

Inhalation: This material has been classified as not hazardous for acute inhalation exposure. Acute toxicity estimate (based on ingredients): $LC_{50} > 5.0$ mg/L for dust.

Skin contact: This material has been classified as not hazardous for acute dermal exposure. Acute toxicity estimate (based on ingredients): $LD_{50} > 2,000$ mg/Kg bw

Ingestion: This material has been classified as not hazardous for acute ingestion exposure. Acute toxicity estimate (based on ingredients): $LD_{50} > 2,000$ mg/Kg bw

Corrosion/Irritancy: Eye: this material has been classified as a Category 1 Hazard (irreversible effects to eyes). Skin: this material has been classified as a Category 1C Hazard (irreversible effects to skin).

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as a Category 1 Hazard (skin sensitiser).

Aspiration hazard: This material has been classified as not an aspiration hazard.

Specific target organ toxicity (single exposure): This material has been classified as not a specific hazard to target organs by a single exposure.

Chronic Toxicity

Mutagenicity: This material has been classified as not a mutagen.

Carcinogenicity: This material has been classified as not a carcinogen.

Reproductive toxicity (including via lactation): This material has been classified as not a reproductive

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toxicant.

Specific target organ toxicity (repeat exposure): This material has been classified as a Category 2 Hazard. Inhalation exposure may result in damage to the respiratory tract.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as a Category Acute 2 Hazard. Acute toxicity estimate (based on ingredients): $> 1 \leq 10$ mg/L

Long-term aquatic hazard: This material has been classified as a Category Chronic 3 Hazard. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): 10 - 100 mg/L, where the substance is not rapidly degradable and/or $BCF \geq 500$ and/or $\log K_{ow} \geq 4$.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the United Nations "Recommendations on the Transport of Dangerous Goods."



UN No:	1760
Dangerous Goods Class:	8
Packing Group:	III
Hazchem Code:	2X
Emergency Response Guide No:	37
Limited Quantities	5 L

Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (PHENOL, 2,4,6-

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TRIS[(DIMETHYLAMINO)METHYL]-; 1-PIPERAZINEETHANAMINE)

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), dangerous when wet substances (Class 4.3), oxidising agents (Class 5.1), organic peroxides (Class 5.2), radioactive substances (Class 7) or food and food packaging in any quantity. Note 1: Concentrated strong alkalis are incompatible with concentrated strong acids. Note 2: Concentrated strong acids are incompatible with concentrated strong alkalis. Note 3: Acids are incompatible with Dangerous Goods of Class 6 which are cyanides. Exemptions may apply.

MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.



UN No: 1760
Dangerous Goods Class: 8
Packing Group: III

Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (PHENOL, 2,4,6-TRIS[(DIMETHYLAMINO)METHYL]-; 1-PIPERAZINEETHANAMINE)

AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.



UN No: 1760
Dangerous Goods Class: 8
Packing Group: III

Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (PHENOL, 2,4,6-TRIS[(DIMETHYLAMINO)METHYL]-; 1-PIPERAZINEETHANAMINE)

15. REGULATORY INFORMATION

This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)
The Stockholm Convention (Persistent Organic Pollutants)
The Rotterdam Convention (Prior Informed Consent)
International Convention for the Prevention of Pollution from Ships (MARPOL)

This material is subject to the following international agreements:

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Basel Convention (Hazardous Waste)

- Wastes from production, formulation and use of resins, latex, plasticizers, glues/adhesives

This material/constituent(s) is covered by the following requirements:

- Maritime and Port Authority of Singapore (Dangerous Goods, Petroleum and Explosives) Regulations
- Workplace Safety and Health (General Provisions) Regulations

16. OTHER INFORMATION

Reason for issue: Revised

This Safety Data Sheet has been prepared by Chemical Data Services Pty Ltd (chemdata.com.au) on behalf of its client.

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since the company cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.