Safety Data Sheet

Hazardous, Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: Flowshield ESD SL - Hardener B

Recommended use: No Information

Supplier: Tremco CPG Australia Pty Ltd
ABN: 25 000 024 064
Street Address: 12/4 Southridge Street
Eastern Creek NSW 2766
Telephone: 02 9638 2755
Facsimile: 02 9638 2955

Emergency Telephone number: 02 9037 2994

2. HAZARDS IDENTIFICATION

This material is hazardous according to the criteria of Safe Work Australia GHS 7.

Signal Word
Danger

Hazard Classifications
Skin Corrosion/Irritation - Category 1A
Reproductive Toxicity - Category 2
Acute Hazard to the Aquatic Environment - Category 1
Chronic Hazard to the Aquatic Environment - Category 1

Hazard Statements

H314	Causes severe skin burns and eye damage.
H361	Suspected of damaging fertility or the unborn child .
H410	Very 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.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust, fume, gas, mist, vapours or spray.
P264	Wash hands, face and all exposed skin thoroughly after handling.
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.
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/insert appropriate source of emergency medical advice.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.

Storage Precautionary Statement

P405	Store locked up.

Disposal Precautionary Statement

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

Poison Schedule:

DANGEROUS GOOD CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Dangerous Goods Class: 8

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Phenol, nonyl-	25154-52-3	25-50 %
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)-	9046-10-0	25-50 %
Phenol, 2,4,6-tris[(dimethylamino)methyl]-	90-72-2	2.5-10 %
bis (dimethylaminomethyl) phenol	71074-89-0	1.0-2.5 %
Ingredients determined to be Non-Hazardous		Balance
		100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Move to fresh air. Consult a physician after significant exposure.

Skin Contact: Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Flush skin with large amounts of water. If irritation develops and persists, get medical attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.

Ingestion: Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

PPE for First Aiders: Wear safety shoes, overalls, gloves, apron, chemical goggles, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from 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. Can cause corneal burns. When symptoms persist or in all cases of doubt seek medical advice. No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

5. FIRE FIGHTING MEASURES

Hazchem Code: 2X

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
Do not allow material to contaminate ground water system. Prevent product from entering drains. May cause long-term adverse effects in the aquatic environment. Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

LARGE SPILLS
Do not allow material to contaminate ground water system. Prevent product from entering drains. May cause long-term adverse effects in the aquatic environment. Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Dangerous Goods - Initial Emergency Response Guide No: 36

7. HANDLING AND STORAGE

Handling: Ensure adequate ventilation. Use personal protective equipment.

Storage: Store in original container. Keep in a dry, cool and well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

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" 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 Safe Work Australia.

Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

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

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

Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

Wear safety shoes, overalls, gloves, apron, chemical goggles, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from 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.

RECOMMENDATIONS FOR CONSUMER USE:
RESPIRATORY PROTECTION: Respirator with a vapor filter.EYE PROTECTION: Tightly fitting safety goggles.HAND PROTECTION: Rubber or plastic gloves. Take note of the information given by the producer concerning permeabilityand break through times, and of special workplace conditions (mechanical strain, duration of contact). Long sleeved clothing.Remove and wash contaminated clothing before re-use. Rubber or plastic apron.OTHER PROTECTIVE EQUIPMENT: No InformationENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confinedareas.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke. Avoid contact with the skin and the eyes. Wash hands before eating, drinking, or smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Colour:	Not determined
Odour:	Ammoniacal

Solubility:	Not determined
Solubility in water:	Not determined
Specific Gravity:	0.0960
Density:	Approx. 2.65
Relative Vapour Density (air=1):	Not determined
Vapour Pressure (20 °C):	Not determined
Flash Point (°C):	100
Flammability Limits (%):	Not determined
Autoignition Temperature (°C):	Not determined
Melting Point/Range (°C):	Not determined
Pour Point/Range (°C):	Not determined
Boiling Point/Range (°C):	N.D - N.D.
Decomposition Point (°C):	Not determined
Sublimation Point (°C):	Not determined
Dropping Point (°C):	Not determined
Viscosity:	Not determined
Surface Tension:	Not determined
Evaporation Rate (n-Butyl acetate=1):	Not determined
Partition Coefficient:	Not determined
Total VOC (g/Litre):	0
Odour Threshold:	not determined
Explosive properties:	not determined
Oxidising properties:	Not determined
% Volatile by Volume:	Not determined
Molecular Formula:	Not determined
Molecular Weight:	Not determined

(Typical values only - consult specification sheet)

N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: No decomposition if stored and applied as directed. Stable under normal conditions.

Conditions to avoid: No Information

Incompatible materials: Strong oxidizing agents. Acids and bases. Amines.

Hazardous decomposition products: Thermal decomposition can lead to release of irritating gases and vapours. Alcohols. Exothermic reaction. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

Hazardous reactions: Hazardous polymerisation does not occur.

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: No information available

Skin contact: No information available

Ingestion: No information available

Eye contact: No information available

Acute toxicity

Inhalation: This material has been classified as not hazardous for acute inhalation exposure. Acute toxicity estimate (based on ingredients): LC_{50} > 20.0 mg/L for vapours or LC_{50} > 5.0 mg/L for dust and mist.

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

polyoxypropylenedriamine LD50 (Rabbit): 2980 mg/kg

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

Nonylphenol LD50 (Rat): 1620 mg/kg oral
polyoxypropylenediamine LD50 (Rat): 2855 mg/kg
2,4,6-tris(dimethylaminomethyl)phenol LD50 (Rat): 2169 mg/kg (Method: Oral)

Corrosion/Irritancy: Eye: this material has been classified as not corrosive or irritating to eyes. Skin: this material has been classified as a Category 1A Hazard (irreversible effects to skin).

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a 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 a Category 2 Hazard.

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: No information

Nonylphenol 48hr EC50 (Daphnia magna): 0.0848 mg/l
Nonylphenol 96hr LC50 (fish): 0.128 mg/l

Long-term aquatic hazard: No information

Ecotoxicity: No information

Persistence and degradability: No information

Bioaccumulative potential: No information

Mobility: No information

13. DISPOSAL CONSIDERATIONS

If recycling is not practicable, dispose of in compliance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT
Classified as Dangerous Goods by the criteria of the “Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

UN No:	2735
Dangerous Goods Class:	8
Packing Group:	II
Hazchem Code:	2X
Emergency Response Guide No:	36
Limited Quantities	1 L
Proper Shipping Name:	AMINES, LIQUID, CORROSIVE, N.O.S.

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. This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.

UN No:	2735
Dangerous Goods Class:	8
Packing Group:	II
Proper Shipping Name:	AMINES, LIQUID, CORROSIVE, N.O.S.

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:	2735
Dangerous Goods Class:	8
Packing Group:	II
Proper Shipping Name:	AMINES, LIQUID, CORROSIVE, N.O.S.

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

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

The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act (Commonwealth): .

16. OTHER INFORMATION

Reason for issue: Revised

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

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