

MATERIAL SAFETY DATA SHEET

SURESHIELD COVING RESIN

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No.

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name SURESHIELD COVING RESIN

Product Code B82046

Company Name FGI, division of Nuplex Industries (Aust) Pty Ltd. (ABN 25 000 045 572)

Address 14 Clearview Place BROOKVALE
NSW 2100

Emergency Tel. 1800 022 037 (24H)

Telephone/Fax Number Tel: (02) 9939 1399
Fax: (02) 9938 5826

Recommended Use Composites fabrication.

Other Names Not Available

Other Information NEW ZEALAND: Nuplex Industries Ltd.
12 Industry Road, Penrose, Auckland
Phone: (09) 579 2029 Fax: (09) 525 1618
Emergency Advice (NZ): Phone: 0800 154 666.

2. HAZARDS IDENTIFICATION

Hazard Classification

HAZARDOUS SUBSTANCE.
DANGEROUS GOODS.

Hazard classification according to the criteria of NOHSC.
Dangerous goods classification according to the Australia
Dangerous Goods Code.

Risk Phrase(s)

R10 Flammable.
R20 Harmful by inhalation.
R36/38 Irritating to eyes and skin.

Safety Phrase (s) S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S38 If insufficient ventilation, wear suitable respiratory equipment.
S23(2) Do not breathe vapour.
S23(3) Do not breathe spray.
S24/25 Avoid contact with skin and eyes.
S37/39 Wear suitable gloves and eye/face protection.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Name	CAS	Proportion
	Quinone and/or phenolic inhibitors	Proprietary	0-0.5 %
	Polyester resin	Proprietary	45-65 %
	Styrene monomer	100-42-5	35-55 %
	Metal Naphthenates and/or Octoates	Proprietary	0-1 %
	Fumed silica	112945-52-5	0-1.5 %
	Alkyl acrylate		0-1 %

4. FIRST AID MEASURES

Inhalation Remove the source of contamination or move the victim to fresh air. Ensure airways are clear and have qualified person give oxygen through a face mask if breathing is difficult. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion DO NOT induce vomiting. Immediately wash mouth out with water and then give water to drink. Seek medical attention.

Skin Wash affected area thoroughly with copious amounts of running water. Remove contaminated clothing and wash before reuse. If symptoms develop seek medical attention.

Eye If in eyes wash out immediately with water. If symptoms persist seek medical attention.

First Aid Facilities Eye wash station, safety shower and normal washroom facilities.

Advice to Doctor Treat symptomatically, for advice, contact the Poisons Information Centre (Australia 131 126; New Zealand 0800 POISON / 0800 764 766). There is aspiration risk associated with this material.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media Extinguish fire with foam, chemical powder, carbon dioxide, water spray or water fog.

Hazards from Combustion Products	Under fire conditions this product may emit toxic and/or irritating fumes including carbon monoxide and carbon dioxide.
Specific Methods	Fire-fighters should wear full protective clothing and self contained breathing apparatus (SCBA) operated in positive pressure mode.
Specific Hazards	This product is flammable. Vapours are heavier than air and will 'travel' to low-level areas e.g. sumps, drains, etc. and flashback. Precautions should be taken to eliminate the build up of explosive mixtures. Polymerisation may occur at elevated temperatures, such as a fire. If polymerisation occurs in a closed container, violent rupture may result.
Hazchem Code	3 [Y]
Precautions in connection with Fire	Water spray may be used to keep fire exposed containers cool.

6. ACCIDENTAL RELEASE MEASURES

Other Information	Remove all sources of ignition. Increase ventilation. Evacuate all unnecessary personnel. Wear sufficient respiratory protection where required and full protective clothing to minimise skin and eye exposure. If possible contain the spill. Place inert absorbent such as vermiculite, sand or dirt onto material. Use clean non-sparking tools to collect the material and place into a suitable labelled container. Do not dilute material but contain. Mop up the remaining material and place into the same container. If large quantities of this material enter the waterways contact the Environmental Protection Authority, or your local Waste Management Authority.
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7. HANDLING AND STORAGE

Precautions for Safe Handling	Handle and use the material in a well-ventilated area, away from sparks, flames and other ignition sources. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Work from suitable, labelled, fire-resistant containers. Keep containers closed when not in use. Wear appropriate protective equipment to prevent inhalation, skin and eye contact.
Conditions for Safe Storage	Store in a cool, dry, well ventilated area away from sources of ignition. This product should be stored away from foodstuffs and strong oxidising agents. Australia: For information on the design of the store-room reference should be made to Australian Standard AS1940, The storage and handling of flammable and combustible liquids. Reference should also be made to any relevant state or local regulations.

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, the available exposure limits on the ingredients, as assigned by both authorities, are as follows: Styrene TWA 50 ppm, 213 mg/m ³ ; STEL 100 ppm, 426 mg/m ³ Quinone TWA 0.1 ppm, 0.44 mg/m ³ Fumed silica TWA 2 mg/m ³ (respirable dust)
Engineering Controls	Good ventilation adequate to maintain the concentration below exposure standards is required.. The ventilation system should be suitable for use with flammable materials. The use of a local exhaust ventilation system (drawing vapours/mists away from workers breathing zone) is strongly recommended.
Respiratory Protection	If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable organic vapour filter should be used. Final choice of appropriate breathing protection is dependant upon actual airborne concentrations and the type of breathing protection required will vary according to individual circumstances. Expert advice may be required to make this decision. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices.
Eye Protection	Safety glasses with side shields, goggles or full faceshield should be worn as described in Australian Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.
Hand Protection	Wear impervious gloves conforming to AS/NZS 2161: Occupational protective gloves. Laminated film gloves offer good protection for prolonged contact with the liquid. Consult glove suppliers to determine other appropriate glove types and, if necessary, test gloves before use.
Body Protection	Suitable protective clothing should be worn e.g. cotton overalls buttoned at neck and wrist. When large quantities are handled the use of plastic aprons and rubber boots is recommended.
Hygiene Measures	Ensure a high level of personal hygiene is maintained when using this product. Always wash hands before eating, drinking, smoking or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear to hazy liquid with a characteristic styrene odour.
Melting Point	Not available
Boiling Point	145°C (for Styrene)
Solubility in Water	Not soluble
Specific Gravity	0.95 - 1.15

pH Value	Not applicable
Vapour Pressure	0.6 kPa at 20°C (for Styrene)
Vapour Density (Air=1)	3.6 (air=1) (for Styrene)
Evaporation Rate	0.49 (n-butyl acetate=1) (for Styrene)
Flash Point	31°C TCC (for Styrene)
Flammability	FLAMMABLE. This product should be stored and used in a well ventilated area away from naked flames, heat, sparks and other sources of ignition. Electrically link and ground metal containers for transfers of the product to prevent accumulation of static electricity. Keep the container tightly closed.
Flammable Limits - Lower	1.1% (for Styrene)
Flammable Limits - Upper	6.1% (for Styrene)

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Incompatible Materials	Alkylation catalysts and strong acids (H ₂ S ₀ 4, H ₃ P ₀ 4, BF ₃ , AlCl ₃), halogens and hydrogen halides. Contact with copper and copper alloys. Oxidising agents.
Hazardous Reactions	Avoid sunlight, open flames, contamination and prolonged storage above 38°C.
Hazardous Polymerization	May occur if contaminated, or at elevated temperatures.

11. TOXICOLOGICAL INFORMATION

Toxicology Information	For Styrene: LD ₅₀ (oral, rat) = 2,650mg/kg LD ₅₀ (dermal, rabbit) > 5,010 mg/kg Eye irritation (Rabbit) (Standard Draize); moderate to severe Skin irritation (Rabbit) (Standard Draize); mild to moderate
Inhalation	Harmful by inhalation. Vapour can cause severe irritation to the respiratory tract. Styrene at 400 ppm is irritating to all parts of the respiratory tract. Styrene possesses narcotic-like properties; excessive exposure may result in headache, dizziness, incoordination, fatigue, nausea, loss of appetite and loss of consciousness.
Ingestion	Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

Skin	A severe skin irritant. Prolonged contact with skin may cause blistering, and repeated contact may have a defatting effect causing dryness and cracking.
Eye	Irritating to eyes. On eye contact this product will cause tearing, stinging, blurred vision, redness and possible conjunctivitis.
Chronic Effects	Continued exposures to levels near 400 ppm can cause respiratory tract irritation; prolonged inhalation of vapours can cause respiratory tract obstruction. Peripheral neuropathy is possible upon long-term exposure to styrene. CNS depression is possible upon long-term exposure to styrene. It is important to note that Styrene is classified as 'possibly carcinogenic to humans (Group 2B)' by the International Agency for Research on Cancer (IARC).

12. ECOLOGICAL INFORMATION

Ecotoxicity	Not available
Persistence / Degradability	Not available
Mobility	Not available
Bioaccumulative Potential	Not available
Environment Protection	Prevent this material entering waterways, drains and sewers.

13. DISPOSAL CONSIDERATIONS

Waste Disposal	The spilled or waste material must be disposed of in accordance with relevant local, state and federal regulations. Uncleaned packaging must be disposed of in the same manner as the material. Contaminated packaging if emptied of all residues and appropriately cleaned, may be sent to a recycling plant.
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14. TRANSPORT INFORMATION

Transport Information	<p>Australia:</p> <p>This material is a Class 3 - Flammable Liquid according to The Australian Code for the Transport of Dangerous Goods by Road and Rail. Class 3 - Flammable Liquids are incompatible in a placard load with any of the following:</p> <ul style="list-style-type: none">- Class 1, Explosives- Class 2.1, Flammable Gases, if both the Class 3 and Class 2.1 dangerous goods are in bulk- Class 2.3, Toxic Gases- Class 4.2, Spontaneously Combustible Substances- Class 5.1, Oxidising Agents and Class 5.2, Organic Peroxides- Class 6, Toxic Substances (where the flammable liquid is nitromethane)
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- Class 7, Radioactive Substances.

New Zealand:

This material is classified as a Class 3 - Flammable Liquid according to NZS 5433:1999 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 2.1) Flammable gases
- (Class 2.3) Toxic gases
- (Class 4.2) Spontaneously combustible substances
- (Class 5.1) Oxidising substances
- (Class 5.2) Organic peroxides or
- (Class 7) Radioactive materials unless specifically exempted.

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 4.2), Spontaneously combustible substances
- (Class 4.3), Dangerous when wet substances
- (Class 5.1), Oxidising substances
- (Class 5.2) Organic peroxides

U.N. Number	1866
Proper Shipping Name	RESIN SOLUTION - Flammable
DG Class	3
Hazchem Code	3[Y]
Packaging Method	3.8.3RT1,RT7
Packing Group	III
EPG Number	3A1
IERG Number	14

15. REGULATORY INFORMATION

Regulatory Information	Poisons Schedule (Australia): S5 Poisons Schedule (New Zealand): Not Scheduled
Hazard Category	Harmful, Irritant

16. OTHER INFORMATION

Date of
preparation or

