

Material Safety Data Sheet

SURESHIELD BODY RESIN (SUMMER)

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No.	No.	Date	2010	by
				NUPLEXIN

Classified as hazardous according to criteria of NOHSC

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name

SURESHIELD BODY RESIN (SUMMER)

Product Code

B82087

Company Name

Nuplex Construction Products, a Divsn of Nuplex Indust. (Aust) Pty Ltd (ABN 25 000 045 572)

Address

49-61 Stephen Road, BOTANY, NSW 2019
New Zealand: Nuplex Industries Ltd., 12 Industry Road, Penrose, Auckland

Emergency Tel.

Australia: 1800 022 037 (24H); New Zealand: 0800 154 666 (24H)

Telephone/Fax Number

Tel: Australia: (02) 9839 4000; New Zealand; (09) 579 2029 Fax: Australia: (02) 9674 6225; New Zealand: (09) 525 1618

Recommended Use

Flooring.

Other Names

Not Available

2. HAZARDS IDENTIFICATION

Hazard Classification

Australia:

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

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).

New Zealand:

Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.

Classified as Dangerous Goods for transport, according to the New Zealand Standard NZS 5433:2007 Transport of Dangerous Goods on Land.

HSNO Classification:

3.1C - Flammable liquid: Medium hazard.

6.1D - Substance that is acutely toxic (oral).

- 6.1D - Substance that is acutely toxic (inhalation).
- 6.3A - Substance that is irritating to the skin.
- 6.4A - Substance that is irritating to the eye.
- 6.6B - Substance that is a suspected human mutagen.
- 6.7B - Substance that is a suspected human carcinogen.
- 6.8B - Substance that is a suspected human reproductive or developmental toxicant.
- 6.9A - Substance that is toxic to human target organs or systems (inhalation).
- 9.1A - Substance that is very toxic in the aquatic environment.
- 9.3B - Substance that is ecotoxic to terrestrial vertebrates.

Hazard Statement Codes:

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H332 Harmful if inhaled.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H341 Suspected of causing genetic defects.
- H351 Suspected of causing cancer.
- H361 Suspected of damaging fertility or the unborn child.
- H372 Causes damage to organs through prolonged or repeated exposure via inhalation.
- H400 Very toxic to aquatic life.
- 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.
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat, sparks, open flames and hot surfaces.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical, ventilating and lighting equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe mist/vapours/spray.
- P264 Wash hands thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P273 Avoid release to the environment.
- P280 Wear protective gloves, protective clothing and eye protection.
- P281 Use personal protective equipment as required.

Precautionary Statement Codes - Response:

GENERAL:

- 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.
- P309+P311 If exposed or if you feel unwell: Call a POISON CENTRE or doctor/physician.
- P370+P378 In case of fire: Use foam, CO2, dry chemical, water fog.
- P391 Collect spillage.

INGESTION:

- P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P330 Rinse mouth.
- P331 Do NOT induce vomiting.

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.

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.
- P337+P313 If eye irritation persists: Get medical advice/attention.

SKIN:

- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P303+P361+P353 IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

Precautionary Statement Codes - Storage:

- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- 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. See Section 13 for disposal details.

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 In case of insufficient ventilation, wear suitable respiratory equipment.
 S51 Use only in well-ventilated areas.
 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	EINECS	Proportion
STYRENE MONOMER	100-42-5	202-851-30-60	5 %
Synthetic Resin	Proprietary		30-60 %
Quinone and/or phenolic inhibitors	Proprietary		0-0.5 %
Other ingredients determined not to be hazardous			(To 100%)

4. FIRST AID MEASURES

Inhalation

Remove the source of contamination or move the victim to fresh air. Ensure airways are clear. Keep at rest. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion

Do not induce vomiting. Immediately wash mouth out with copious amount of water. 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. Continue flushing for several minutes until all contaminants are washed off completely. Seek medical attention.

First Aid Facilities

Eye wash station, safety shower and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice in an emergency, 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

Extinguish fire with water fog, water spray, foam, dry chemical powder or carbon dioxide.

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes and gases including carbon monoxide and carbon dioxide.

Specific Hazards

Flammable liquid. Vapours are heavier than air and can accumulate in low areas; they may travel a considerable distance to a source of ignition and flash back. Precautions should be taken to eliminate the build up of explosive mixtures. Polymerisation may occur at elevated temperatures. If polymerisation occurs in a closed container, violent rupture may result.

Hazchem Code

•3Y

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

Exclude sources of ignition and ventilate the area. Clear area of all unprotected personnel. Slippery when spilled. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye exposure and inhalation of vapours. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other non-combustible material). Collect and seal in properly labelled containers for disposal. The disposal must be done in accordance with applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Wear appropriate protective equipment to prevent inhalation, skin and eye contact. 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. Flameproof equipment is necessary in area where the product is being used. Earth (ground) containers and lines during transfer of the product.

Conditions for Safe Storage

Store in the shade, in a well-ventilated area preferably below 30°C and well away from sources of ignition. This product should be stored away from foodstuffs, strong oxidising agents and other incompatible materials. Refer to AS1940 for information on handling and storage of flammable liquids. Handle and store in accordance with applicable local and national regulations for flammable liquids. The product has a limited storage life due to inhibitor depletion and should be used within the specified shelf life. Rapid polymerisation resulting in violent rupture of closed containers and possible fire from flammable vapours may be initiated by high temperatures or certain contaminants. Oxidising agents (e.g. organic peroxides), strong acids (e.g. sulphuric acid), ferrous salts present in rust, and some metal halides promote polymerisation. Alkalis reduce the inhibitor concentration and increase the risk of spontaneous polymerisation. Contamination of the product with these substances should be avoided. Exposure to UV radiation (including from light fittings), can initiate slow polymerisation that may continue in a sealed container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards

No exposure standards have been established for this material by the National Occupational Health & Safety Commission (NOHSC), Australia 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 given below.

National Occupational Health And Safety Commission (NOHSC), Australia exposure standards:

Substance TWA STEL Notices

ppm mg/m³ ppm mg/m³

Styrene 50 213 100 426 -

p-Benzoquinone [Quinone] 0.1 0.44 - - -

New Zealand Occupational Safety and Health Service (OSH) Workplace exposure standards:

Substance TWA STEL Notices

ppm mg/m³ ppm mg/m³

Styrene 50 213 100 426 Sk

p-Benzoquinone [Quinone] 0.1 0.44 - - -

As published by the National Occupational Health and Safety Commission (NOHSC), Australia and the New Zealand Occupational Safety and Health Service (OSH).

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.
STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

'Sk' Notice: Absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

Biological Limit Values

No biological limit allocated.

Engineering Controls

Ensure ventilation is adequate to maintain concentrations below exposure standards. The use of a local exhaust ventilation system, drawing vapours/mists away from workers' breathing zone, is normally required. The ventilation and exhaust system must be approved for use with flammable materials.

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. 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 or chemical goggles should be worn. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection

Wear impervious gloves conforming to AS/NZS 2161: Occupational protective gloves. Laminate film and supported PVA gloves offer good protection for prolonged contact with the liquid. Consult glove suppliers to determine other appropriate glove types and, if possible, test gloves before use. 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 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 after handling the product and before eating, drinking, smoking or using the toilet facilities.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Clear to hazy liquid.

Odour

Characteristic styrene odour.

Melting Point

Not available

Boiling Point

145°C (for Styrene)

Solubility in Water

Insoluble

Specific Gravity

0.95-1.15

pH Value

Not available

Vapour Pressure

0.6 kPa at 20°C (for Styrene)

Vapour Density (Air=1)

3.6 (for Styrene)

Evaporation Rate

0.49 (n-Butyl acetate=1) (for Styrene)

Viscosity

Not available

Flash Point

31°C (Tag Closed Cup) (for Styrene)

Flammability

Flammable liquid.

Auto-Ignition Temperature

490°C (for Styrene)

Flammable Limits - Lower

1.1% v/v (for Styrene)

Flammable Limits - Upper

6.1% v/v (for Styrene)

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions of handling and storage.

Conditions to Avoid

Ignition sources, contamination and prolonged storage above 38°C.

Incompatible Materials

Strong oxidising agents; alkylation catalysts and strong acids (H₂SO₄, H₃PO₄, BF₃, AlCl₃), halogens and hydrogen halides, copper and copper alloys.

Hazardous Decomposition Products

Thermal decomposition may release toxic and/or irritating fumes and gases including carbon monoxide and carbon dioxide.

Hazardous Reactions

May undergo hazardous polymerisation in closed containers at elevated temperatures and in the presence of initiating contaminants.

Hazardous Polymerization

May occur if contaminated, or at elevated temperatures.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

No toxicity data are available for this specific product. The available data for the ingredients are as follows:

For Styrene:

LD50 (Oral, Mouse): 316 mg/kg

LC50 (Inhalation, Mouse): 6.8 mg/L

LC50 (Inhalation, Rat): 2770 ppm/4h

Inhalation

Harmful by inhalation. Vapour can cause severe irritation to the respiratory tract. Styrene possesses narcotic-like properties; excessive exposure may result in headache, dizziness, incoordination, fatigue, nausea and loss of consciousness.

Ingestion

Swallowing of this product may irritate the gastric tract causing nausea and vomiting. Subsequent to swallowing or vomiting, small amounts of liquid aspirated into the respiratory system may cause severe pulmonary injury that may lead to death.

Skin

Irritating to skin. Contact with skin may cause redness, discomfort and blistering. Repeated contact may have a defatting effect causing dryness and cracking of skin.

Eye

Irritating to eyes. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Chronic Effects

Prolonged inhalation of vapours may cause respiratory tract obstruction and lung damage. Long-term exposure to Styrene may cause peripheral neuropathy, CNS depression, and damage to the liver and kidneys. Styrene is a suspected human carcinogen.

Carcinogenicity

Styrene is classified as 'possibly carcinogenic to humans (Group 2B)' by the International Agency for Research on Cancer (IARC).

Styrene is classified as '6.7B - Substance that is a suspected human carcinogen' by ERMA, New Zealand.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Styrene is moderately toxic to fish and daphnia, and highly toxic to algae.

Persistence / Degradability

Not available

Mobility

Not available

Bioaccumulative Potential

Not available

Environ. Prevent this material entering drains, sewers and waterways.

Protection**Acute Toxicity - Fish**

For Styrene:

LC50 (fathead minnow): 10 mg/L/96h

Acute Toxicity - Daphnia

For Styrene:

EC50 (daphnia magna): 4.7 mg/L/48h

Acute Toxicity - Algae

For Styrene:

EC50 (green algae): 0.72 mg/L/96h

13. DISPOSAL CONSIDERATIONS

Disposal Considerations**Product Disposal:**

Product wastes are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. This product can be disposed through a licensed commercial waste collection service. In this specific case the product is a solvent-based, flammable substance and therefore can be sent to an approved high temperature incineration plant for disposal. Large volumes may be re-distilled by solvent recovery contractors. Alternatively the waste product can be cured to a inert solid and disposed through a licenced landfill facility.

Personal protective clothing and equipment as specified in Section 8 of this SDS must be worn during handling and disposal of this product. The ventilation requirements as specified in the same section must also be followed, and the precautions given in Section 7 of this SDS regarding handling must also be followed. Do not dispose into the sewerage system. Do not discharge into drains or watercourses or dispose where ground or surface waters may be affected.

In New Zealand, the disposal agency or contractor must comply with the New Zealand Hazardous Substances (Disposal) Regulations 2001. Further details regarding disposal can be obtained on the ERMA New Zealand website under specific group standards.

Container Disposal:

The container or packaging must be cleaned and rendered incapable of holding any substance. It can then be disposed of in a manner consistent with that of the substance it contained. In this instance the packaging can be disposed through a commercial waste collection service.

Alternatively, the container or packaging can be recycled if the hazardous residues have been thoroughly cleaned or rendered non-hazardous.

In New Zealand, the packaging (that may or may not hold any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

14. TRANSPORT INFORMATION

Transport Information**Australia:**

This material is classified as a Class 3 (Flammable Liquids) Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).

Class 3 Dangerous Goods are incompatible in a placard load with any of the following:

- 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
- Class 5.2, Organic Peroxides
- Class 6, Toxic and Infectious Substances, if the Class 3 dangerous goods are nitromethane
- Class 7, Radioactive Substances

New Zealand:

This material is classified as a Class 3 - Flammable Liquid 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 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

U.N. Number

1866

Proper Shipping Name

RESIN SOLUTION

DG Class

3

Hazchem Code

•3Y

Packing Group

III

IERG Number

14

15. REGULATORY INFORMATION

Regulatory Information

Australia:

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

Classified as a Scheduled Poisons according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule

S5

National and or International Regulatory Information

New Zealand:

Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.

All components of this product are listed on the New Zealand Inventory of Chemicals (NZIoC) or exempted.

Group Standard:

Additives, Process Chemicals and Raw Materials (Flammable, Toxic [6.7]) Group Standard 2006

HSNO Approval Number

HSR002502

Hazard Category

Harmful, Irritant, Flammable

AICS (Australia)

All components of this product are listed on the Australian Inventory of Chemical Substances (AICS) or exempted.

16. OTHER INFORMATION

Date of preparation or last revision of MSDS

MSDS Reviewed: November 2010

Supersedes: December 2005

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.

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End of MSDS
