



Moulding and Casting Materials Sales: +61 03 9579 2044 sales@solidsolutions.com.au
19 Ardena Crt, East Bentleigh Admin: +61 03 9579 1889 admin@solidsolutions.com.au
PO Box 142, Vic, 3165 Fax: +61 03 9579 0573 www.solidsolutions.com.au

British United Industries (Vic) Pty Ltd ATF Byrne Hughes Family Business Trust Trading as A to Z Solid Solutions ABN 46 977 073 014 ACN 006 303 591

Material Safety Data Sheet

NSR UP RESIN (Polyester Embedding Resin 480)

Infosafe No. 1HLBT **Issue Date** March 2001 **Status** ISSUED by NUPLEXNZ

Classified as hazardous according to criteria of NOHSC

COMPANY DETAILS

Company Name Nuplex Industries (Aust) Pty Ltd (ABN 25 000 045 572)
Address 49-61 Stephen Road Botany
NSW 2019
Emergency Tel. 1800 022 037
Tel/Fax Tel: (02) 9839 4000 Fax: (02) 9674 6225
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

IDENTIFICATION

Product Code Various
Product Name NSR UP RESIN
Proper Shipping Name RESIN SOLUTION
Other Names Not Available
UN Number 1866
DG Class 3
Packing Group III
Hazchem Code 3[Y]
Poisons Schedule S5
Product Use Composites fabrication.

Physical Data

Appearance Clear to hazy liquid.
Boiling Point 145°C *
Vapour Pressure 0.6 kPa at 20°C *
Specific Gravity 0.95 - 1.15 (H2O = 1) Dependant on non-volatile content.
Flash Point 31°C TCC *
Flamm. Limit LEL 1.1% *
Flamm. Limit UEL 6.1% *
Solubility in Insoluble.

Water

Other Properties

Evaporation

Rate 0.49 (Butyl acetate = 1) *

Vapour Density 3.6 (Air = 1) *

Odour Characteristic styrene.

Colour May be tinted.

Form Liquid

Stability Stable under normal storage conditions.

Haz.

Polymerization May occur if contaminated, or at elevated temperatures.

Materials to Avoid Alkylation catalysts and strong acids (H₂S₀₄, H₃P₀₄, BF₃, A₁C₁₃), halogens and hydrogen halides. Contact with copper and copper alloys. Oxidising agents.

Other Information * for Styrene.

Ingredients

Information on

Composition Some grades may contain non-hazardous tints / pigments.

Ingredients	Name	CAS	Proportion
	Polyester resin	Proprietary	30-60 %
	Styrene Monomer	100-42-5	30-60 %
	Quinone and/or phenolic inhibitors	Proprietary	0-0.5 %

HEALTH HAZARD INFORMATION

Health Effects

Acute -

Swallowed May result in irritation, vomiting and depression.

Acute - Eye A severe eye irritant.

Acute - Skin A severe skin irritant. Prolonged contact with skin may cause blistering, and repeated contact may have a defatting effect causing dryness and cracking.

Acute - Inhaled 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.

Chronic Detailed toxicological information is available on request.

First Aid

Swallowed DO NOT induce vomiting. Give a glass of water. Seek immediate medical assistance.
Eye Irrigate with copious quantity of water for at least 15 minutes. Seek medical assistance.

Skin Wash with plenty of soap and water. Remove contaminated clothing, including shoes. Seek medical assistance if symptoms persist.

Inhaled Using proper respiratory protection, immediately remove the affected person from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Seek immediate medical assistance.

First Aid Eye wash fountains and safety showers should be easily accessible.



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Facilities

Advice to Doctor

Advice to Doctor Aspiration may cause pneumonitis. Administration of vegetable oil with or without activated charcoal is recommended for initial treatment of irritant effect on the alimentary canal.

Other Health Hazard Information

Carcinogenicity Styrene is classified as 'possibly carcinogenic to humans' by the International Agency for Research on Cancer (IARC). Detailed toxicological information is available on request.

PRECAUTIONS FOR USE

Exposure Limits	Name	STEL (mgm3)	STEL (ppm)	TWA (mgm3)	TWA (ppm)	FootNote
	Styrene Monomer	426	100	213	50	

Eng. Controls Use in well ventilated area only. Provide ventilation to control exposure limit below Exposure Standard.

Personal Protection

Respirator Type (AS 1716) Where concentrations in air may exceed the recommended exposure limits, or work practice or other means of exposure reduction are not adequate, approved respirator may be necessary to prevent overexposure by inhalation.

Eye Protection Safety glasses or chemical goggles as appropriate.

Glove Type Chemical resistant gloves.

Clothing Long sleeved overalls.

Footwear Safety boots.

Flammability

Fire Hazards Flammable. Keep away from heat, sparks or naked flames.

SAFE HANDLING INFORMATION

Storage and Transport

Storage Precautions Store in well ventilated area, ideally below 27°C in a closed container and dry area to avoid spoilage. Open drums slowly to relieve any internal pressure. In bulk storage check vents and flame arrestors for plugging and the formation of polymer. Ground all connections, containers etc when using. Store away from sources of heat or ignition. Store away from oxidising agents. Avoid prolonged storage over 38°C.

Transport Flammable liquid, Class 3.

Special Shipping Information IMDG 3.3 Marine Pollutant.

Proper Shipping

Name RESIN SOLUTION

EPG Number 3A1

IERG Number 14



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Packaging Method 3.8.3RT1,RT7

Spills and Disposal

Spills & Disposal Extinguish or remove all sources of ignition. Clear area of all unprotected personnel. Wear appropriate protection equipment. Do not contaminate streams, rivers or water courses. Do not flush drains or sewers. Inform local authority if liquid enters drains, sewers, streams etc. Shut off sources of leak if safe to do so. Dike and contain spill with sand or earth.
MINOR: Absorb the liquid with sand, earth or other inert absorbent. Place used absorbent in suitable, sealable, labelled containers. Keep away from heat, naked flame or sparks.
MAJOR: Take up liquid with vacuum truck or absorb with sand, earth or other inert absorbent. Place used absorbent in suitable, sealable, labelled containers. Keep away from heat, naked flame or sparks.

Disposal Other Disposal Info. Dispose of in accordance with Local, State and Federal regulations.
May be treated to convert to solid resin.

Fire/Explosion Hazard

Fire/Explos. Hazard Polymerisation may occur at elevated temperatures, such as a fire. If polymerisation occurs in a closed container, violent rupture may result.

Hazardous Decomposition or Byproducts Carbon monoxide, carbon dioxide, fumes and smoke.

Fire Fighting Procedures Wear full body protective clothing, and self-contained breathing apparatus.

Fire Fighting Precautions Water spray may be used to keep fire exposed containers cool.

Extinguishing Media Foam, carbon dioxide or dry chemical.

Hazardous Reaction Avoid sunlight, open flames, contamination and prolonged storage above 38°C.

Hazchem Code 3[Y]

OTHER INFORMATION

Toxicology for Styrene:
Oral LD50 (Rat): 4,370mg/kg, slightly toxic
Dermal LD50 (Rabbit): Greater than 5,010 mg/kg, practically non toxic
Eye irritation (Rabbit): (FHSA) 10.3 on a scale of 110.0, slightly irritating
Skin irritation (Rabbit): (FHSA) 2.4 on a scale of 8.0, slightly irritating
Vapour inhalation (Rat): 4 out of 6 rats died during a six hour exposure to 3,290 ppm
More extensive toxicological information is available on request.

Environment Protection Avoid contaminating waterways. Harmful to aquatic life.

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

Safety Statement S23 Do not breathe gas/fumes/vapour/spray

Pkg. & Labelling Class 3 labels in accordance with the Australian Code for the Transport of Dangerous Goods, including Schedule 5 Poison and Marine Pollutant requirements.

Hazard Category Harmful,Irritant

CONTACT POINT

Contact For further information ask for: For specialist advice in emergencies: Australia 1800 022 037; New Zealand 0800 154 666.



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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.

End of MSDS