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1414 POLYESTER U.P. LAMINATING RESIN

PRODUCT IDENTIFICATION

Product Name...: 1414 GP Laminating Resin
Other Names...: General Purpose Laminating Resin
Description...: Diacid/Glycol Condensate.
UN Number...: 1866 (Resin Solution, Flammable, HFP).
Dangerous Goods Class...: Class 3.2 Flammable Liquid FP 23-61 C.
and Subsidiary Risk. Packaging Group 111
Hazchem Code...: 3[Y]
Poisons Schedule Number...: Contains S5 substance (Styrene).
Chemical Name...: Unsaturated Polyester resin dissolved in styrene.
Manufacturer...: Dalchem
Use...: Fibreglass Reinforced Plastics Manufacture.

PHYSICAL DESCRIPTION / PROPERTIES

Appearance & Odour...: Blue, Moderately Viscous Liquid with a Sweet Pungent Odour
Typical of Styrene.
Boiling Point...: Styrene @ 146 Deg. C.(May polymerize below
boiling point).
Melting Point...: N/A.
Evaporation Rate...: 3.10 (Butyl Acetate = 1.0).
Vapour Pressure...: 4.50 mm Hg.@ 20 Deg. C.(Styrene).
Specific Gravity...: 1.00- 1.11 (Water = 1.00).
Flash Point...: 31-33 Deg.C.(Styrene).Method...:Abel Closed Cup
Flammable Limits ...: LEL Styrene 1.10.
% by Volume in Air UEL Styrene 6.10.
Water Solubility...: Immiscible.
Vapour Density (Air = 1)...: 3.55 (Styrene).





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Physical Description and Properties... continued.

Other Properties...:

NFPA Flammable/Combustible Liquid Classification...:1C

NFPA Codes ...: Flammability...3, Health...2, Reactivity...2, Special... None.
(0 - Low Hazard, 4 - High Hazard)

Extinguishing Media...: Water Fog, Dry Chemical, Foam, Carbon Dioxide

Autoignition Temperature...: 490 Deg. C. (Styrene).

Stability...:

The product has limited storage life at ambient temperatures due to the depletion of polymerization inhibitor. Use within six (6) months of delivery.

Excessive heat will accelerate inhibitor depletion, and allow spontaneous polymerization to begin.

Materials to Avoid...:

Acids, Oxidizing Agents, Free Radical Initiators such as peroxides, and Metallic Halides and Soaps.

Conditions to Avoid...:

Prolonged storage above 25 Deg. C., Sunlight, Open Flame, and all forms of contaminants. Ensure containers are tightly sealed at all times.

Hazardous Decomposition Products...:

Carbon Monoxide, Carbon Dioxide, and Low Molecular Weight Hydrocarbons may be released as a result of incomplete combustion.

INGREDIENTS

Chemical Name	CAS Number	Percent Present
Unsaturated Polyester Resin dissolved in Styrene.	Propriety.	50 - 60% by weight.
Styrene Monomer	100-42-5	40 - 50% by weight

HEALTH HAZARD INFORMATION

This product is considered a possible carcinogen by the IARC.

For hazard communication purposes under OSHA Standard 20 CFR Part 1910.1200, Styrene is listed as a possible carcinogen by IARC. Neither the data from various long term animal studies nor from epidemiology of workers exposed to Styrene provide an adequate basis to conclude that Styrene is carcinogenic.

No toxicological data is available on the product itself.

Summary of Risks...:

Causes irritation to the throat, eyes, and nose.

Skin irritation may occur in some individuals.

Harmful if inhaled at high vapour concentration.

Medical Conditions which may be Aggravated by Contact...:

Contact and inhalation of vapour may aggravate preexisting respiratory and skin disorders.



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Health Hazard Information... continued.

Target Organs...: CNS, Respiratory System, Eyes, and Skin.
Primary Entry Routes...: Inhalation, Ingestion, Contact.:
Acute Effects...: May irritate the eyes, nose, throat, and Skin.

Chronic Effects...:

The victim may feel drugged, sleepy, or become unconscious. Repeated skin contact may cause blistering in some individuals, and the defatting effect due to the Styrene may cause cracking, dryness, and rash. Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and nervous system damage, however occupational exposure to this material has not been reported to cause significant adverse health effects where recommended occupational control procedures are followed. Styrene possesses narcotic-like properties; excessive exposure may result in headache, dizziness, incoordination, fatigue, nausea, loss of appetite and loss of consciousness. The intentional misuse of the product by deliberately concentrating and inhaling its vapour may be harmful or fatal.

Signs and Symptoms of Overexposure...:

Eye Contact...: Causes irritation to the eyes.
Skin Contact...: May cause irritation to the skin.
Inhalation...: Irritates the eyes, nose, and throat. May feel drugged, sleepy, or can become unconscious.
Ingestion...: Will cause the victim to become weak, unsteady, or can become unconscious.

EMERGENCY FIRST AID PROCEDURES

Eye Contact...:

Immediately flush with plenty of fresh clean water for at least 15 minutes. Obtain prompt medical attention.

Contact lenses should not be worn when working with this material.

Skin Contact...:

If on the skin, immediately wash off with plenty of soap and water. Remove contaminated clothing. Wash clothing before reuse.

Inhalation...:

Remove the exposed person(s) to fresh air. If not breathing apply artificial respiration and C.P.R. If breathing difficult, administer oxygen and call medical attention.

Ingestion...:

DO NOT induce vomiting. If patient is conscious give a glass of water. TRANSPORT TO DOCTOR or HOSPITAL IMMEDIATELY. keep careful watch over patient until medical assistance is available.

PRECAUTIONS FOR USE

Exposure Standards...:

Exposure Limits...: TLV/TWA (8hr.) 50 ppm.
STEL (15 Min.) 100 ppm.

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Precautions for use... continued.

Engineering Controls...:

All equipment should be flame/explosion proof.

All equipment should be grounded during transfer, and all pumping equipment should be non-sparking flame and explosion proof.

Personal Protection...:

No toxicological data is available on the product itself. Chronic over-exposure of laboratory animals to Styrene has been found to cause liver abnormalities and lung damage.

Personal Protection Equipment...:

1) Use chemical and solvent resistant safety goggles:

2) Use chemical and solvent resistant gloves. Ensure the inside surfaces of the gloves remain clean and dry.

3) Use a chemical cartridge vapour absorbent respirator with NIOSH/OSHA approved organic vapour cartridge to 400 ppm. At exposure levels above 400 ppm. use self contained or positive pressure breathing apparatus.

4) Wear a face shield and a chemical/solvent resistant apron where splashing is likely to occur.

SAFE HANDLING INFORMATION**STORAGE****Storage Segregation...:**

Store in a cool dry place away from incompatible materials and all forms of ignition and heat.

Flammable Liquid, store in accordance with Local and or State regulations.

Special Handling/Storage...:

Store in an area below 25 Deg. C. and out of direct sunlight. Keep away from all forms of heat and possible sources of ignition.

Emptied containers should be regarded as being hazardous.

Other Precautions...:

Do not transfer to nonapproved unlabeled containers.

Keep out of the reach of children.

Exercise good workplace housekeeping rules.

TRANSPORT

Australian Transport Code...: UN No. 1866 (Resin Solution, Flammable, HFP).

Contains Styrene.

Class 3.2 Flammable Liquid FP 23-61 C.

Packaging Group 111

Hazchem Code 3[Y]

G.T. EPG 3C1



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SPILL, LEAK, AND DISPOSAL INFORMATION

This product is a "Hazardous Waste" because of its inherent characteristics and ignitability. In the advent of any spill or leak of this material, Remove all sources of ignition. Ventilate the area. Prevent the spilt material from entering drains or waterways. Remove personnel from the area. Absorb the spill using Vermiculite, Dry Sand, or Earth.

Spill/Leak Procedures...:

(a) Small Spill or Leak...:

Soak up the spill with absorbent material and place into drums for later disposal.

(b) Large Spill or Leak...:

Dike area with sand and pump or scoop the spilt material into drums for later disposal. Treat the residual spilt material as for a small spill or leak.

Waste Management/Disposal...:

Dispose of the waste material in accordance with Local, State, and or Federal regulations.

Containers...:

Emptied containers retain vapour and residual material and therefore entail an explosion and toxic vapour hazard. All hazard precautions given in this data sheet must be observed until the container is cleaned, reconditioned, or destroyed.

FIRE and EXPLOSION DATA

Unusual Fire or Explosion Hazards...:

At elevated temperatures, such as in a fire situation, polymerization may take place resulting in violent rupture of the closed containers.

Wear positive pressure breathing apparatus, and eye protection. Keep vapours away from possible ignition sources.

Special Fire-Fighting Procedures...:

If electrical equipment is involved, the use of water and or foam should be avoided.

Handling equipment should be cooled by water stream if exposed to the fire.

OTHER PRECAUTIONS

Workplace Considerations...:

Ventilation...:

Mechanical ventilation is acceptable, however local exhaust is preferred. Air flow should be away from the operator. Use explosion proof equipment.

Safety Stations...:

Safety Drench and Eye Wash stations are recommended. Good quality First Aid equipment should also be readily available in an emergency.

Contaminated Equipment...:

Clean contaminated equipment with an appropriate solvent prior to storage. Store waste solvent in sealed drums for later disposal or recycling.

Solvent storage and disposal to be per Local, State, and or Federal regulations.



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IMPORTANT NOTICE

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CONTACT POINTS...:

24hr Emergency Phone: 0414 398 368 or 000

End MSDS... UPLAM
