

Material Safety Data Sheet

SELLEYS

PTY LIMITED

ACN 000 049 427

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name: FIBREGLASS REPAIR KIT

Synonyms:

CAS-No.:

Molecular Formula:

Manufacturer's Code:

100mL kit 9300697100313 - 100mL tube resin
10g tube hardener
small fibreglass mat
200mL kit 9300697106520 - 2x100mL tube resin
2x10g tube hardener
fibreglass mat
80g bag filler

Supplier: Selleys Pty Limited

ACN: 000 049 427

Street Address: 1 Gow Street
Padstow 2211
Australia

Telephone: + 61 2 9707 8111

Facsimile: + 61 2 9707 8225

Emergency telephone number: 1 800 033 111 (ALL HOURS)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Recommended use: Repairs fibreglass, plywood, metal, fibre sheeting and plastics.

Appearance: Resin - Clear pale blue viscous liquid with a solvent (styrene) odour.

Hardener - Blue paste with a solvent odour.

Filler - Fine white powder; odourless.

CHEMICAL ENTITY	CAS NO.	PROPORTION (% weight per weight)

RESIN:		
Polyester resin	-	60%
Styrene	100-42-5	35%
Additives	-	5%
HARDENER:		
1-hydroxy-1-hydroperoxydicyclohexyl peroxide	78-18-2	50%
Diisobutyl phthalate	84-69-5	33%
Other non hazardous ingredients	-	17%

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FILLER:

Talc 14807-96-6 99%

Surface treated titanium dioxide - 1%

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

3. HAZARDS IDENTIFICATION

Hazardous according to criteria of Worksafe Australia.

Hazard Category

(A)	RESIN PART A:
Xn	Harmful
Xi	Irritant
(B)	HARDENER PART B:
Xn	Harmful
C	Corrosive

R-phrases(s)

(A)	RESIN PART A:
R10	Flammable.
R20	Harmful by inhalation.
R36/38	Irritating to eyes and skin.
(B)	HARDENER PART B:
R 7	May cause fire.
R22	Harmful if swallowed.
R34	Causes burns.
R36	Irritating to eyes.

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by road or rail.

Class: 3 Flammable Liquid

Poisons Schedule: S5

This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

4. FIRST AID MEASURES

Poison Information Centres in each State capital city can provide additional assistance for scheduled poisons.

Ingestion: Rinse mouth with water. Give a glass of water to drink. Do NOT induce vomiting. Seek immediate medical assistance.

Eye contact: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.

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Skin contact: Wash contaminated skin with plenty of soap and water. Remove contaminated clothing and wash before re-use. If swelling, redness, blistering, or irritation occurs seek medical advice.

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have qualified person give oxygen through a face mask. If breathing has stopped apply artificial respiration at once. In event of cardiac arrest, apply external cardiac massage. Seek medical advice if effects persist.

Notes to physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Specific hazards: Flammable resin and hardener. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) must be eliminated both in and near the work area. Do NOT smoke.

Fire fighting further advice: Flammable liquid. On burning will emit toxic fumes. Heating can cause polymerisation to occur leading to violent rupture of containers. If safe to do so, remove containers from path of fire. Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or products of combustion.

Suitable extinguishing media: Foam, dry agent (carbon dioxide, dry chemical powder).

6. ACCIDENTAL RELEASE MEASURES

Shut off all possible sources of ignition. Increase ventilation. Wear protective equipment to prevent skin and eye contamination and inhalation of vapours. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers for disposal.

7. HANDLING AND STORAGE

Storage: Store in a cool place and out of direct sunlight. Store in well ventilated area. Store away from heat, strong alkalis, strong acids, oxidising agents, metals, metal powders, and foodstuffs. Store away from sources of heat or ignition. Keep containers closed when not in use - check regularly for leaks. Avoid shock and friction.

This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits

No value assigned for this specific material by the National Occupational Health and Safety Commission (Worksafe Australia).

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However, Exposure Standards for constituents:

	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Talc	-	2.5	-	-
Styrene	50	213	100	426

As published by the National Occupational Health and Safety Commission (Worksafe Australia).

TWA - the Time-Weighted Average airborne concentrations over an eight-hour working day, for a five-day working week over an entire working life.

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 work day. According to current knowledge these concentrations should neither impair the health of, nor cause undue discomfort to, nearly all workers.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. Exposure Standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Engineering measures: Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. Keep containers closed when not in use.

Personal protection equipment: Selleys Safe Handling Code:

Resin - BLUE

Hardener - ORANGE

Filler - VIOLET

Avoid all contact. Wear overalls, full face shield, elbow-length impervious gloves, splash apron and rubber boots. Use with adequate ventilation. If inhalation risk exists wear air supplied mask meeting the requirements of AS/NZ 1715 and AS/NZ 1716. Always wash hands before smoking drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: Resin - Clear pale blue viscous liquid with a solvent (styrene) odour.

Hardener - Blue paste with a solvent odour.

Filler - Fine white powder; odourless.

Solubility: All components are insoluble in water.

RESIN:

Specific Gravity (20 C)	: 1.0	Melting Point (C)	: N App
Rel Vapour Density (air=1)	: 3.6	Boiling Point (C)	: 145
Vapour Pressure (25 C)	: N Av	Decomp. Point (C)	: N Av
Flash Point (C)	: 31	Sublimation Point	: N App
Flammability Limits (%)	: 1.1-8.0	pH	: N App
Autoignition Temp (C)	: 490	Viscosity	: 900 mPa.s
% Volatile by weight	: N Av	Evaporation Rate	: N Av
Solubility in water (g/L)	: Insoluble	(n-Butyl acetate=1)	

HARDENER:

Specific Gravity (20 C)	: 1.07	Melting Point (C)	: N Av
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Rel Vapour Density (air=1) :	N Av	Boiling Point (C) :	N App
Vapour Pressure (20 C) :	N Av	Decomp. Point (C) :	N Av
Flash Point (C) :	> 45	Sublimation Point :	N App
Flammability Limits (%) :	N Av	pH :	N App
Autoignition Temp (C) :	375	Viscosity :	N Av
% Volatile by weight :	None	Evaporation Rate :	N Av
Solubility in water (g/L) :	Insoluble	(n-Butyl acetate=1)	

FILLER:

Specific Gravity (20 C) :	N Av	Melting Point (C) :	N Av
Rel Vapour Density (air=1) :	N App	Boiling Point (C) :	N App
Vapour Pressure (20 C) :	N App	Decomp. Point (C) :	N Av
Flash Point (C) :	None	Sublimation Point :	N App
Flammability Limits (%) :	N App	pH :	N App
Autoignition Temp (C) :	N App	Viscosity :	N Av
% Volatile by volume :	N Av	Evaporation Rate :	N Av
Solubility in water (g/L) :	Insoluble	(n-Butyl acetate=1)	

(Typical values only - consult specification sheet)

N Av = Not available

N App = Not applicable

10. STABILITY AND REACTIVITY

Stability: Resin - Reacts with heat, strong acids, oxidising agents, copper and copper alloys.

Hardener - An oxidising agent. Free radical generator. Reacts with strong alkalis, strong acids, dirt, rust, metals and metal powders.

Filler - No information available.

11. TOXICOLOGICAL INFORMATION

Main symptoms: No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled are:

Ingestion: Swallowing can result in nausea, vomiting and abdominal pain.

Eye contact: The resin contains styrene, a severe eye irritant. The curing agent contains dibutyl phthalate, a mild eye irritant which may cause watering of eyes; and 1-hydroxy-1-hydroperoxydicyclohexyl peroxide, a severe eye irritant. Contact with the eyes can result in delayed, reversible effects such as conjunctivitis.

Skin contact: Contact with skin will result in irritation. Repeated or prolonged skin contact may lead to irritant contact dermatitis.

Inhalation: For resin - vapour is irritant to mucous membranes and respiratory tract. Inhalation of vapour can result in headaches, dizziness and possible nausea. Inhalation of high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and, if exposure is prolonged, unconsciousness. For filler - inhalation of dust will result in respiratory irritation.

Long Term Effects: Chronic exposure to resin (containing styrene) can lead to 'styrene sickness' with symptoms of nausea, vomiting, generalised weakness and difficulty in concentrating.

Acute toxicity / Chronic toxicity

No LD50 data available for product.

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However, for styrene (1):

Oral LD50(rat): 5000 mg/kg

Inhalation LC50(rat): 12000 mg/m³/4 hours

EYES: Severe irritant (rabbit)

SKIN: Moderate irritant (rabbit)

Immediate mucous membrane irritation is a common occurrence at levels of about 220-430 mg/m³ in previously unexposed human subjects. Regular exposure of workers to concentrations around 430 mg/m³ produced mild effects on the central nervous system.

There are a large number of reports of chromosomal effects in cells of the blood or bone marrow of workers exposed to variable and in some cases high levels of styrene.

There was no evidence of any teratogenic effects when pregnant rats, mice, hamsters and rabbits were exposed to styrene by inhalation. Some foetotoxic effects were observed at high concentrations when signs of toxicity occurred in the maternal animals.

This material has been classified by the International Agency for Research on Cancer (IARC) as a Group 2B agent.

Group 2B - The agent is possibly carcinogenic to humans.

There is limited evidence of the carcinogenicity of this compound in mice.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

13. DISPOSAL CONSIDERATIONS

Refer to State Land Waste Management Authority. Advise flammable nature of resin. Normally suitable for disposal at approved land waste site.

14. TRANSPORT INFORMATION

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by road or rail.

UN-No: 3269
Class: 3 Flammable Liquid
Hazchem code: 3[Y]
EPG: 3A1
Packing group: Packing Group 3

Proper shipping name: POLYESTER RESIN KIT

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), flammable gases (Class 2.1), if both are in bulk, toxic gases (Class 2.3), spontaneously combustible substances (Class 4.2), oxidising agents (Class 5.1), organic peroxides (Class 5.2), radioactive substances (Class 7), however exemptions may apply.

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15. REGULATORY INFORMATION

Hazardous according to criteria of Worksafe Australia.

Hazard Category

(A)	RESIN PART A:
Xn	Harmful
Xi	Irritant
(B)	HARDENER PART B:
Xn	Harmful
C	Corrosive

R-phrases(s)

(A)	RESIN PART A:
R10	Flammable.
R20	Harmful by inhalation.
R36/38	Irritating to eyes and skin.
(B)	HARDENER PART B:
R 7	May cause fire.
R22	Harmful if swallowed.
R34	Causes burns.
R36	Irritating to eyes.

S-phrases(s)

(A)	RESIN PART A:
S23	Do not breathe vapour.
(B)	HARDENER PART B:
S3/7/9:	Keep container tightly closed in a cool, well-ventilated place.
S14	Keep away from easily oxidizable materials.
S27	Take off immediately all contaminated clothing.
S34	Avoid shock and friction.
S37/39	Wear suitable gloves and eye/face protection.

Poisons Schedule: S5

16. OTHER INFORMATION

Literary reference

(1) Safety Data Sheet - Styrene; 000010129501; Orica Australia Pty Ltd; 08/97.
This Material Safety Data Sheet has been prepared by SHE Pacific Pty Ltd on behalf of Orica Ltd and its subsidiary companies.

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Reason(s) For Issue: Change to Dangerous Goods Requirements. Change in Formulation. Change in Hazardous Substance Classification.

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

For further copies of this sheet or other product information contact
Selleys Pty Limited Customer Service.

Phone: 1300 555 205 (Australia wide)

Fax: 1300 555 305 (Australia wide)

This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since Orica Limited and its subsidiaries cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.