

# **SAFETY DATA SHEET**

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name PROTITE FIBREGLASS RESIN
Synonym(s) PF-FR0250, PF-FR0500, PF-FR1000

1.2 Uses and uses advised against

Use(s) FIBREGLASS REINFORCEMENT • FIBREGLASS REPAIR • RESIN

1.3 Details of the supplier of the product

Supplier name TRADEWARE GROUP PTY LTD

Address 32 Airds Road, Minto, NSW, 2566, AUSTRALIA

 Telephone
 1300 658 494

 Fax
 1300 658 453

 1.4 Emergency telephone number(s)

**Emergency** 13 11 26 (Poisons Information Centre)

# 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO AUSTRALIAN WHS REGULATIONS

**GHS classification(s)** Flammable Liquids: Category 3

Skin Corrosion/Irritation: Category 2 Skin Sensitization: Category 1

Serious Eye Damage / Eye Irritation: Category 2A

Specific Target Organ Systemic Toxicity (Single Exposure): Category 3

Carcinogenicity: Category 2

Specific Target Organ Systemic Toxicity (Repeated Exposure): Category 2

## 2.2 Label elements

Signal word WARNING

Pictogram(s)







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# Hazard statement(s)

H226 Flammable liquid and vapour. H315 Causes skin irritation.

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.



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#### Prevention statement(s)

P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.
P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

#### Response statement(s)

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P321 Specific treatment is advised - see first aid instructions.
P362 Take off contaminated clothing and wash before re-use.
P370 + P378 In case of fire: Use appropriate media for extinction.

#### Storage statement(s)

P403 + P233 + P235 Store in a well-ventilated place. Keep cool. Keep container tightly closed.

P405 Store locked up.

#### Disposal statement(s)

P501 Dispose of contents/container in accordance with relevant regulations.

## 2.3 Other hazards

No information provided.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

# 3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
STYRENE	100-42-5	202-851-5	<35%
METHYL METHACRYLATE	80-62-6	201-297-1	1 to 8%
UNSATURATED POLYESTER RESIN	-	-	45 to 75%

# 4. FIRST AID MEASURES

# 4.1 Description of first aid measures

Eye If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to

stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

an Air-line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If

swallowed, do not induce vomiting.

## 4.2 Most important symptoms and effects, both acute and delayed

Irritating to the eyes, skin and respiratory system. May cause sensitisation by skin contact. Suspected of causing cancer. May cause damage to organs (nasal epithelial and ear) and through prolonged or repeated exposure.

## 4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

Ingestion

# 5. FIRE FIGHTING MEASURES



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#### 5.1 Extinguishing media

Dry agent, carbon dioxide or foam. Prevent contamination of drains and waterways.

# 5.2 Special hazards arising from the substance or mixture

Flammable. May evolve toxic gases (carbon and styrene oxides, hydrocarbons) when heated to decomposition. Styrene will polymerise readily at elevated temperatures and may violently rupture sealed containers. May form explosive mixtures with air. Eliminate all ignition sources including cigarettes, open flames, spark producing switches/tools, pilot lights, heaters, naked lights, mobile phones, etc when handling. Earth containers when dispensing fluids. May evolve styrene and methyl methacralate when heated to decomposition.

#### 5.3 Advice for firefighters

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

## 5.4 Hazchem code

•3Y

- •3 Alcohol Resistant Foam is the preferred firefighting medium but, if it is not available, normal foam can be used.
- Y Risk of violent reaction or explosion. Wear full fire kit and breathing apparatus. Contain spill and run-off.

# 6. ACCIDENTAL RELEASE MEASURES

## 6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

#### 6.2 Environmental precautions

Prevent product from entering drains and waterways.

## 6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal. Eliminate all sources of ignition.

#### 6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

## 7. HANDLING AND STORAGE

# 7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

## 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should have appropriate ventilation and fire protection systems.

# 7.3 Specific end use(s)

No information provided.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### 8.1 Control parameters

## **Exposure standards**

Ingredient	Reference	TWA		STEL	
		ppm	mg/m³	ppm	mg/m³
Methyl methacrylate	SWA (AUS)	50	208	100	416
Styrene, monomer	SWA (AUS)	50	213	100	426



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## **Biological limits**

Ingredient	Determinant	Sampling Time	BEI
STYRENE	Mandelic acid plus phenylglyoxylic acid in urine	End of shift	400 mg/g creatinine
	Styrene in venous blood	End of shift	0.2 mg/L

Reference: ACGIH Biological Exposure Indices

#### 8.2 Exposure controls

Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical explosion proof

extraction ventilation is recommended. Flammable/explosive vapours may accumulate in poorly ventilated areas. Vapours are heavier than air and may travel some distance to an ignition source and flash back.

Maintain vapour/mist levels below the recommended exposure standard.

PPE

**Eye / Face** Wear splash-proof goggles. **Hands** Wear viton (R) or nitrile gloves.

**Body** Wear coveralls.

Respiratory Wear a Type A (Organic vapour) respirator. If sanding dry product, wear a Class P1 (Particulate) respirator.









# 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

Appearance VISCOUS LIQUID

Odour SWEET OR SHARP AROMATIC ODOUR

Flammability
Flash point
Boiling point
Melting point
Evaporation rate
pH
FLAMMABLE
23°C to 33°C (cc)
100°C (Approximately)
NOT AVAILABLE
NOT AVAILABLE
NOT AVAILABLE

Vapour density > 1 (Air = 1)

Specific gravity 1.1

Solubility (water) INSOLUBLE Vapour pressure NOT AVAILABLE

Upper explosion limit 12.5 % Lower explosion limit 1.1 %

Partition coefficient
Autoignition temperature
Decomposition temperature
Viscosity
Explosive properties
Oxidising properties
Odour threshold

NOT AVAILABLE
A90°C (Styrene)
NOT AVAILABLE
NOT AVAILABLE
NOT AVAILABLE
NOT AVAILABLE

9.2 Other information

**% Volatiles** 33 % to 67 %

# 10. STABILITY AND REACTIVITY

## 10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

# 10.2 Chemical stability

Stable under recommended conditions of storage.



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#### 10.3 Possibility of hazardous reactions

Styrene may polymerise with violent rupture/explosion.

#### 10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

## 10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), alkalis (e.g. sodium hydroxide), amines, halogens, sunlight, ferrous salts, heat and ignition sources. May polymerise with violent rupture/explosion. Incompatible with alkylation catalysts, halogen and hydrogen halides, alkali metal-metal graphite compounds and butyl lithium and organic peroxides.

#### 10.6 Hazardous decomposition products

May evolve toxic gases (carbon and styrene oxides, hydrocarbons) when heated to decomposition.

# 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Acute toxicity Information available for the product:

May be harmful if inhaled.

Information available for the ingredient(s):

Ingredient	Oral Toxicity (LD50)	Dermal Toxicity (LD50)	Inhalation Toxicity (LC50)
STYRENE	316 mg/kg (mouse)		9500 mg/m³/4 hours
METHYL METHACRYLATE	3625 mg/kg (mouse)	> 5000 mg/kg (rabbit)	

Contact may result in drying and defatting of the skin, rash and dermatitis. Skin

Contact may result in irritation, lacrimation, pain and redness. Eve

Sensitization May cause an allergic skin reaction. This product is not classified as a respiratory sensitiser.

Mutagenicity Insufficient data available to classify as a mutagen.

Styrene is classified as possibly carcinogenic to humans (IARC Group 2B). Carcinogenicity

Insufficient data available to classify as a reproductive toxin. Reproductive

Over exposure may result in irritation of the nose and throat, coughing, nausea, vomiting, dizziness and

STOT - single breathing difficulties. High level exposure may result in respiratory paralysis and unconsciousness. exposure

STOT - repeated May cause damage to organs (nasal epithelial and ear) through prolonged or repeated exposure to styrene if

inhaled. exposure

**Aspiration** Not classified as causing aspiration.

# 12. ECOLOGICAL INFORMATION

# 12.1 Toxicity

No information provided.

## 12.2 Persistence and degradability

WATER: If released to water, styrene will volatilise relatively rapidly and biodegrade, but is not expected to hydrolyse. SOIL: If released to soil it will biodegrade and have low soil mobility. ATMOSPHERE: If released to the atmosphere, styrene will react rapidly with both hydroxyl radicals and ozone with a combined calculated half-life of about 5 hours.

## 12.3 Bioaccumulative potential

No information provided.

#### 12.4 Mobility in soil

No information provided.

#### 12.5 Other adverse effects

No information provided.

# 13. DISPOSAL CONSIDERATIONS



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#### 13.1 Waste treatment methods

Waste disposal Mix components together (small amounts), absorb with sand, vermiculite or similar and dispose of to an

approved landfill site. Ensure protective equipment is worn when mixing. Do not seal containers/tins until reaction is complete. Contact the manufacturer/supplier for additional information (if required). Prevent

contamination of drains and waterways as environmental damage may result.

**Legislation** Dispose of in accordance with relevant local legislation.

# 14. TRANSPORT INFORMATION

## CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE



	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	1866	1866	1866
14.2 Proper Shipping Name	RESIN SOLUTION, flammable	RESIN SOLUTION, flammable	RESIN SOLUTION, flammable
14.3 Transport hazard class	3	3	3
14.4 Packing Group	III	III	III

14.5 Environmental hazards No information provided

# 14.6 Special precautions for user

 Hazchem code
 •3Y

 GTEPG
 3A1

 EMS
 F-E, S-E

# 15. REGULATORY INFORMATION

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

**Poison schedule** Classified as a Schedule 5 (S5) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and

Labelling of Chemicals.

The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous

Substances [NOHSC: 1008(2004)].

Hazard codesCarc.CarcinogenFFlammableXiIrritantXnHarmful

Risk phrases

R10 Flammable.

R36/37/38 Irritating to eyes, respiratory system and skin.

R40 Limited evidence of a carcinogenic effect.
R43 May cause sensitisation by skin contact.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Safety phrases S2 Keep out of reach of children.

S23 Do not breathe gas/fumes/vapour/spray (where applicable).

S24 Avoid contact with skin. S37 Wear suitable gloves.

S46 If swallowed, contact a doctor or Poisons Information Centre immediately and show container

or label.

Inventory listing(s) AUSTRALIA: AICS (Australian Inventory of Chemical Substances)

All components are listed on AICS, or are exempt.



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# 16. OTHER INFORMATION

#### **Additional information**

EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES: Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

#### PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

#### HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

#### **Abbreviations**

ACGIH American Conference of Governmental Industrial Hygienists

CAS # Chemical Abstract Service number - used to uniquely identify chemical compounds

CNS Central Nervous System

EC No. EC No - European Community Number

EMS Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous

Goods)

GHS Globally Harmonized System

GTEPG Group Text Emergency Procedure Guide IARC International Agency for Research on Cancer

LC50 Lethal Concentration, 50% / Median Lethal Concentration

LD50 Lethal Dose, 50% / Median Lethal Dose

mg/m³ Milligrams per Cubic Metre
OEL Occupational Exposure Limit

pH relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly

alkaline).

ppm Parts Per Million

STEL Short-Term Exposure Limit

STOT-RE Specific target organ toxicity (repeated exposure)
STOT-SE Specific target organ toxicity (single exposure)

SUSMP Standard for the Uniform Scheduling of Medicines and Poisons

SWA Safe Work Australia
TLV Threshold Limit Value
TWA Time Weighted Average

# Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

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