

SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name	FASLOC RESIN CAPSULE (NZ)
Synonyms	FASLOC DUO SPEED RESIN (RO/RW/RL) • FASLOC LOW INSERTION FORCE (RL) RESIN CAPSULE • FASLOC OIL BASED RESIN CAPSULE (RO) • FASLOC RESIN (RO/RW/RL) • FASLOC RESIN CAPSULE (RO/RW/RL) • FASLOC SINGLE SPEED RESIN (RO/RW/RL) • FASLOC TORQ RESIN (RQ) • FASLOC TWO SPEED RESIN (RO/RW/RL) • FASLOC WATER BASED RESIN CAPSULE (RW)

1.2 Uses and uses advised against

Uses	AS PER MANUFACTURER INSTRUCTIONS • BONDING AGENT • REINFORCEMENT Resin anchoring grout contained within a plastic sheath used for support with rock bolts in mines & tunnels.
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1.3 Details of the supplier of the product

Supplier name	ROCBOLT RESINS PTY LTD
Address	Unit 2, 40-44 Anzac Avenue, Smeaton Grange, NSW, 2567, AUSTRALIA
Telephone	+61 2 4647 8388
Email	asykes@rocboltresins.com.au
Website	https://www.rocboltresins.com.au

1.4 Emergency telephone numbers

Emergency	+61 4 3152 9183
Emergency	+61 4 6721 6449

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

HAZARDOUS ACCORDING TO NZ ENVIRONMENTAL PROTECTION AUTHORITY CRITERIA

Physical Hazards

Not classified as a Physical Hazard

Health Hazards

Carcinogenicity: Category 2
Germ Cell Mutagenicity: Category 2
Serious Eye Damage / Eye Irritation: Category 2
Skin Corrosion/Irritation: Category 2
Specific Target Organ Toxicity (Repeated Exposure): Category 1
Toxic to Reproduction: Category 2

Environmental Hazards

Aquatic Toxicity (Acute): Category 1

2.2 GHS Label elements

Signal word **DANGER**

Pictograms



PRODUCT NAME FASLOC RESIN CAPSULE (NZ)**Hazard statements**

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.
H400	Very toxic to aquatic life.

Prevention statements

P102	Keep out of reach of children.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash 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/eye protection/face protection/hearing protection.

Response statements

P101	If medical advice is needed, have product container or label at hand.
P302 + P352	IF ON SKIN: Wash with plenty of water.
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.
P331	Do NOT induce vomiting.
P362	Take off contaminated clothing.
P391	Collect spillage.

Storage statements

P405	Store locked up.
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Disposal statements

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

The materials contained in this product may only represent a hazard if the integrity of the packaging is compromised. If the capsule packaging is compromised (eg leaks/splits) the product may cause an allergic skin reaction, skin irritation and serious eye irritation.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
LIMESTONE (CALCIUM CARBONATE)	1317-65-3	215-279-6	>50%
POLYESTER RESIN(S)	39459-88-6	-	<30%
STYRENE	100-42-5	202-851-5	<=10%
BENZOYL PEROXIDE	94-36-0	202-327-6	<1%

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.
Inhalation	If inhaled, remove person from area of 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. Seek medical advice if effects persist.
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.
Ingestion	For advice, contact the National Poisons Centre on 0800 764 766 (0800 POISON) or +643 479 7248 or a doctor (at once). If swallowed, do not induce vomiting. Ingestion is considered unlikely due to product form.
First aid facilities	None allocated.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

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

Non flammable. May evolve toxic gases (carbon oxides, styrene, hydrocarbons) when heated to decomposition. Styrene may polymerise readily at elevated temperatures and may violently rupture sealed containers.

5.3 Advice for firefighters

Non flammable. Evacuate area and contact emergency services. Toxic gases (hydrocarbons, carbon oxides, styrene) may be evolved when heated. 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 nearby storage areas.

5.4 Hazchem code

2Z

2 Fine Water Spray.

Z 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. Ventilate area where possible.

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 uses

No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Benzoyl peroxide	WES [NZ]	--	5	--	--
Limestone (Calcium carbonate)	WES [NZ]	--	10	--	--
Styrene monomer (Phenylethylene, vinyl benzene)	WES [NZ]	20	85	40	170

Biological limits

Ingredient	Determinant	Sampling Time	BEI
STYRENE	Mandelic acid plus phenylglyoxylic acid in urine	End of shift	150 mg/g creatinine
	Styrene in urine	End of shift	20 µg/L

Reference: ACGIH Biological Exposure Indices

8.2 Exposure controls

Engineering controls Maintain dust / vapour levels below the recommended exposure standard.

PPE

- Eye / Face** Wear splash-proof goggles or safety glasses. The selection of PPE is dependent on a detailed site specific risk assessment. This should consider the work situation, the physical form of the chemical, the handling methods and environmental factors.
- Hands** Wear barrier gloves.
- Body** Wear coveralls. With prolonged use, wear coveralls.
- Respiratory** If determined by a risk assessment and inhalation risk exists, wear an organic vapour/particulate respirator or an air supplied mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	WHITE CATALYST PREMIX SEPARATED FROM RESIN MASTIC WITH PIGMENTS AND INERT FILLERS, ENCLOSED IN A CAPSULE FILM
Odour	SLIGHT STYRENE SMELL
Flammability	DOES NOT SUSTAIN COMBUSTION
Flash point	> 95°C (oc)
Boiling point	NOT APPLICABLE
Melting point	NOT APPLICABLE
Evaporation rate	NOT APPLICABLE
pH	NOT APPLICABLE
Vapour density	3.6 (Air = 1) (Styrene)
Relative density	2.0
Solubility (water)	INSOLUBLE
Vapour pressure	NOT APPLICABLE
Upper explosion limit	NOT APPLICABLE
Lower explosion limit	NOT APPLICABLE
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	70,000 cPs
Explosive properties	NOT AVAILABLE

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9.1 Information on basic physical and chemical properties

Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

9.2 Other information

% Volatiles	NOT APPLICABLE
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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.

10.3 Possibility of hazardous reactions

Styrene may polymerise with violent rupture/explosion. Polymerises with evolution of heat. Avoid contact with curing agents, accelerators, and/or initiators.

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.

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 Due to the product form (enclosed), contact with contents is not anticipated with normal use. May be harmful if swallowed.

Information available for the ingredients:

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
LIMESTONE (CALCIUM CARBONATE)	> 5000 mg/kg (rat)	--	--
STYRENE	> 2000 mg/kg (rat)	> 2000 mg/kg (rat) (OECD 402)	11.8 mg/L/4 hours (rat) (vapour)
BENZOYL PEROXIDE	5700 mg/kg (mouse)	> 1000 mg/kg (mammal)	--

Skin Due to product encapsulation, the potential for skin contact with contents is reduced. If the container is damaged, contact may result in irritation, redness, pain, rash, dermatitis and possible burns. Effects may be delayed.

Eye Due to product encapsulation, the potential for eye contact with contents is reduced. If the container is damaged, direct contact may result in irritation, lacrimation and burns.

Sensitisation Not classified as causing skin or respiratory sensitisation.

Mutagenicity Due to the product encapsulation, exposure to contents is not anticipated with normal use. Suspected of causing genetic defects.

Carcinogenicity Due to the product encapsulation, exposure to contents is not anticipated with normal use. Styrene is classified as probably carcinogenic to humans (IARC Group 2A).

Reproductive Due to the product encapsulation, exposure to contents is not anticipated with normal use. Styrene is suspected of damaging the unborn child.

STOT - single exposure Over exposure may result in irritation of the nose and throat, coughing, nausea, vomiting, dizziness and breathing difficulties. High level exposure may result in respiratory paralysis and unconsciousness.

STOT - repeated exposure Due to product encapsulation, the potential for exposure to the contents is reduced. May cause damage to organs (nasal epithelial and ear) through prolonged or repeated exposure to styrene if inhaled.

Aspiration Not classified as causing aspiration.

12. ECOLOGICAL INFORMATION

PRODUCT NAME FASLOC RESIN CAPSULE (NZ)**12.1 Toxicity**

Very toxic to aquatic life.

12.2 Persistence and degradability

No information provided.

12.3 Bioaccumulative potential

No information provided.

12.4 Mobility in soil

No information provided.

12.5 Other adverse effects

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. If released to environmental bodies of water, styrene will volatilise relatively rapidly and biodegrade, but is not expected to hydrolyse. If released to soil it will biodegrade and have low soil mobility.

13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Waste disposal For small quantities, mix with other component/s, absorb with sand, vermiculite or similar and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information (if required). Ensure protective equipment is worn when mixing. Prevent contamination of drains and waterways as aquatic life may be threatened and environmental damage may result.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO LAND TRANSPORT RULE: DANGEROUS GOODS 2005, IMDG AND IATA



	LAND TRANSPORT (NZS 5433)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	3077	3077	3077
14.2 Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains styrene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains styrene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains styrene)
14.3 Transport hazard class	9	9	9
14.4 Packing Group	III	III	III

14.5 Environmental hazards

Marine Pollutant.

14.6 Special precautions for user

Hazchem code 2Z

EmS F-A, S-F

Other information The environmentally hazardous substance mark is not required when transported in packages of less than 5 kg/L (UN Model Regulations: Special Provision 375; IATA: Special Provision A197; IMDG: Special Provision 969).

15. REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Approval code HSR002545 (2020)

Group standard Construction Products (Carcinogenic) Group Standard 2020

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Inventory listings **AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals)**
All components are listed on AIIC, or are exempt.
NEW ZEALAND: NZIoC (New Zealand Inventory of Chemicals)
All components are listed on the NZIoC inventory, or are exempt.

16. OTHER INFORMATION

Additional information **ORGANIC PEROXIDES:** Fires involving organic peroxides can be intense and move rapidly due to product rapid decomposition with release of oxygen and may involve explosions. If spilt on combustible materials it may spontaneously ignite. A diluent is often added to organic peroxides to reduce shock sensitivity.

IARC GROUP 2B - POSSIBLE HUMAN CARCINOGEN. This product contains an ingredient which has demonstrated sufficient evidence to have been classified by the International Agency for Research into Cancer (IARC) as possibly carcinogenic to humans and whose use should be strictly monitored and controlled.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, 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: form of product; 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 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
	CCID	Chemical Classification and Information Database (HSNO)
	CNS	Central Nervous System
	EC No.	EC No - European Community Number
	EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
	EPA	Environmental Protection Authority [New Zealand]
	GHS	Globally Harmonized System
	HSNO	Hazardous Substances and New Organisms
	IARC	International Agency for Research on Cancer
	LC50	Lethal Concentration, 50% / Median Lethal Concentration
	LD50	Lethal Dose, 50% / Median Lethal Dose
	mg/m ³	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)
	TLV	Threshold Limit Value
	TWA	Time Weighted Average

PRODUCT NAME FASLOC RESIN CAPSULE (NZ)

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.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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