
1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name J-LOK RESIN CAPSULES

Synonyms J- LOK SINGLE SPEED RESIN (JLS) • J-LOK 5 STAR RESIN (JL5) • J-LOK DUAL SPEED RESIN (JLD) • J-LOK G SERIES RESIN (JG) • J-LOK H SERIES RESIN CAPSULE (H) • J-LOK LOW INSERTION FORCE (LIF) RESIN (JLL, HL) • J-LOK POSTGROUT CABLE RESIN (JLPG, JL5PG) • J-LOK RESIN CAPSULE (JL) • J-LOK TENDON RESIN (JLT) • J-LOK TWIN RESIN (JLH, JL5H) • RAPID DEVELOPMENT (RD) RESIN • SPIN2STALL® RESIN (STS)

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.

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

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

Physical Hazards

Not classified as a Physical Hazard

Health Hazards

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

Environmental Hazards

Not classified as an Environmental Hazard

2.2 GHS Label elements

Signal word WARNING

Pictograms



PRODUCT NAME J-LOK RESIN CAPSULES

Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H341	Suspected of causing genetic defects.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

Prevention statements

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.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

Response statements

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.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Storage statements

P405	Store locked up.
------	------------------

Disposal statements

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

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 from contaminated area. To protect rescuer, use a Type A (Organic vapour) respirator or 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.
Ingestion	For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.
First aid facilities	Eye wash facilities and safety shower should be available.

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

PRODUCT NAME J-LOK RESIN CAPSULES

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

None allocated.

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 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	SWA [AUS]	--	5	--	--
Calcium carbonate (Limestone, Marble, Whiting)	SWA [AUS]	--	10	--	--
Styrene, monomer	SWA [AUS]	50	213	100	426
Styrene, monomer	SWA [Proposed]	20	85	40	170

Biological limits

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

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 PVA or Viton® gloves.
Body	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
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

9.2 Other information

% Volatiles	NOT APPLICABLE
--------------------	----------------

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.

PRODUCT NAME J-LOK RESIN CAPSULES

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.

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 The overall genotoxicity of styrene cannot be excluded.

Carcinogenicity Styrene is classified as probably carcinogenic to humans (IARC Group 2A).

Reproductive 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

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

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.

PRODUCT NAME J-LOK RESIN CAPSULES

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	None allocated.	None allocated.	None allocated.
14.2 Proper Shipping Name	None allocated.	None allocated.	None allocated.
14.3 Transport hazard class	None allocated.	None allocated.	None allocated.
14.4 Packing Group	None allocated.	None allocated.	None allocated.

14.5 Environmental hazards

No information provided.

14.6 Special precautions for user

Hazchem code None allocated.

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 Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).

Inventory listings **AUSTRALIA: AIIIC (Australian Inventory of Industrial Chemicals)**
All components are listed on AIIIC, or are exempt.

16. OTHER INFORMATION

Additional information 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.

WELDING - SANDING - CUTTING DRIED OR CURED PRODUCT: If sanding, cutting or welding dried or cured product, adverse health effects may be avoided by the use of appropriate engineering controls and/or personal protective equipment. If welding, wear a Class P2 (Metal fume) respirator and depending on the nature of the surface being welded, additional protection (e.g. for organic vapours/acid gas) may also be required. A Class P1 (Particulate) respirator is recommended if dust is generated.

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 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
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/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)
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.

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.

Prepared by

Risk Management Technologies
5 Ventnor Ave, West Perth
Western Australia 6005
Phone: +61 8 9322 1711
Fax: +61 8 9322 1794
Email: info@rmtglobal.com
Web: www.rmtglobal.com

[End of SDS]