



Material Safety Data Sheet

RocLoc[®] Pourable Resin

1. Identification of the Product and the Company

Product Name : RocLoc[®] Pourable Resin.
Application : Anchoring bolts or tendons.
Producer : RSC Ekusasa Mining Joint Venture (Pty) Ltd.
Address : 1 Tedstone Road, Germiston, 1422.
Telephone : +27(0) 11 824 8660
Fax : +27(0) 11 824 8670
Website : www.rscekusasa.co.za
Emergency Contact No Office Hours : +(27)0 11 824 8660
Emergency Contact No After Hours : +27(0)82 890 2543 /+27(0)73 035 4484

2. Hazardous Identification

Main Hazards : R10 Flammable.
: R20 Harmful by Inhalation.
: R36/38 Irritating to eyes and skin
: Marine Pollutant.

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation SANS10234:2008 / (EC) No 1272/008

Flammable liquids, Hazard Category 3 - H226.

Skin Irritation, Hazard Category 2 - H317.

Eye Irritation, Hazard Category 2 - H320.

Specific target organ toxicity - Single exposure, Hazard Category 3, Respiratory tract irritation - H335.

2.2 Label Elements

2.2.1 Labelling according to Regulation SANS10234:2008 / (EC) No 1272/008

Signal Word : Warning

Pictogram :   

Hazard Statement(s) : Flammable liquid and vapour
: May cause skin irritation
: May cause serious eye irritation
: May cause respiratory irritation

Precautionary Statement(s) : P101 - If medical advice is needed, have product container or label at hand.
: 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.
: P280 - Wear protective gloves/clothing/eye and face protection.
: P260 - Do not breathe dust/fumes/gas/mist/vapours/spray.
: P309 - If exposed or if you feel unwell: Call a doctor/poison centre.
: P311 - If exposed or if you feel unwell: Call a doctor/poison centre.
: P501 - Dispose of contents and container as hazardous waste.

3. Composition / Information on ingredients**3.1 Description of the substance or mixture**

Unsaturated Polyester Resin, containing Styrene, Inert fillers, N,N-Dimethyl-P-Toluidine, Pigment and Water.

3.2 Hazardous Information

Substance Name	CAS No.	% ww
Styrene	100-42-5	<12.5%
Dibenzoyl Peroxide	94-36-0	<1%
N,N-Dimethyl-P-Toluidine	99-97-8	<0.1%

4. First Aid Measures**4.1 Description of first aid measures****If inhaled**

If breathed in, move person into fresh air. Keep warm, calm and at rest. Loosen tight clothing, tie, strap, belt, collar. Provide oxygen, give CPR if not breathing. Seek medical attention immediately.

In case of skin contact

Wash skin with soap and water. Remove contaminated clothing and wash before reuse. Get medical attention if irritation persists or symptoms of exposure develop. Consult a physician.

In case of eye contact

Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Consult a doctor immediately.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Do not induce vomiting because of risk of aspiration into the lungs. If vomiting occurs, keep the victim's head in a low position so that vomit does not enter the lungs during climb. Consult a physician, poison control centre.

Advice for primary healthcare providers:

When you provide medical help, always protect yourself against exposure to chemicals or blood borne diseases by wearing gloves, masks and protective devices for the eyes. If administer cardiopulmonary resuscitation, use oral components, resuscitation bags, pocket masks or other ventilation devices. After administer first aid, wash the exposed skin with soap and water.

4.2 Most important symptoms and effects, both acute and delayed

Eyes: Irritation, feeling of burning.

Skin: irritation. Skin can be damaged by prolonged contact.

Inhalation: Irritation of the upper respiratory tract, drowsiness, headaches and fatigue.

Ingestion: Severe irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Seek medical attention. Note to physician: Treat symptomatically.

5. Fire-fighting Measures**5.1 Extinguishing media**

Suitable extinguishing media

Use water spray, dry chemical or carbon dioxide.

Unsuitable extinguishing media:

Water jet (high pressure).

5.2 Special hazards arising from the substance or mixture

In case of fire may form unknown toxic and / or irritating compounds and acrylic combustion products - Do not breathe.

5.3 Advice for fire-fighters

Use water spray to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water and the remains of the fire according to applicable regulations.

Protective equipment for fire-fighters Hard-hat with visor, fireproof clothing, work gloves and a self-respirator in case of large amounts of smoke.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Stop leak if there is no risk of exposure. Do not handle damaged containers or the leaked product before donning appropriate protective gear. The windows and doors must be kept open for good ventilation. Areas may be slippery. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the spill area. Issue NO SMOKING and NO NAKED FLAMES warnings.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Notify the competent authorities if material has polluted waterways, drains, soil or air.

6.3 Methods and materials for containment and cleaning up

Use inert absorbent material (sand, vermiculite, diatomaceous earth, etc.) to soak up leaked product. Collect the majority of the remaining material and deposit it in containers for disposal. If there are no contraindications, use a jet of water to eliminate product residues. Make sure the leakage site is well aired. Contaminated material should be disposed of in accordance with the provisions set out in section 13.

6.4 Reference to other sections

For personal protective equipment see section 8 & for disposal see section 13.

7. Handling and Storage

7.1 Handling

Avoid skin and eye contact. Do not inhale fumes. Do not use near sources of ignition. Wash hands thoroughly after handling/use. Use gloves.

7.2 Storage

Store in a dry, cool and well ventilated environment. Underground storage in return air only.

8. Exposure Controls / Personal Protection

8.1 Ventilation

Local exhaust to the outside (care given to possible environmental exposure).

8.2 Personal Protective Equipment

Impervious gloves, chemical goggles and overalls.

9. Physical and Chemical Properties

Physical State	: Liquid Resin and Inert Fillers.
Colour	: Coloured resin mastic and white catalyst paste.
Odour	: Pungent, dominated by Styrene.
Boiling Point	: 145°C
Flash Point	: >30°C
Solubility in water	: Insoluble
Specific Gravity (H ₂ O=1)	: 2.01

RSC Ekusasa Mining is ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 accredited and has a certified Integrated Management System in place.

10. Stability and Reactivity

10.1 Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2 Chemical Stability

The product is stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions

No dangerous reactions under normal use and storage conditions. Can enhance the combustion of other substances.

10.4 Conditions to avoid

Do not mix with other chemicals. Heat (direct sunlight/extreme temperatures), open flame and ignition sources.

10.5 Incompatible materials

Resin (Styrene) - strong acids, Alkalies and Oxidising agents, catalyst (BPO) - Reducing agents, Amines and Accelerators

10.6 Hazardous decomposition products

Resin (Styrene Oxide and acid fumes due to heat, Oxides of carbon. Catalyst (BPO) - Carbon Monoxide, Carbon Dioxide and Benzoic acid.

11. Toxicological Information

11.1 Information on toxicological effects

Toxicological study has not been conducted on this product.

Acute toxicity:

Styrene: LD 50 oral 5000 mg/kg rat, LC 50 inhalation 11,8 mg / l / 4H rat, LD 50 skin >2000 mg/Kg rat

Dibenzoyl Peroxide: LD 50 oral 3310 mg/kg rat, LC 50 inhalation 24,3 mg / l / 4H rat

Acute toxicity - oral: Not conventionally classified.

Acute toxicity - dermal: Not conventionally classified.

Acute toxicity - inhalation: Not conventionally classified.

Corrosion / irritation of the skin: Category 2.

Serious eye damage / irritation: Category 2.

Respiratory or skin sensitisation: Not conventionally classified. Contains skin sensitizer.

Germ cell mutagenicity: Not conventionally classified.

Carcinogenicity: Not conventionally classified.

Reproductive toxicity: Category 2.

Specific target organ toxicity (STOT) - single exposure: Category 3, inhalation.

Specific target organ toxicity - (STOT) repeated exposure: Category 2.

12. Ecological Information

12.1 Toxicity
May cause ecological damage in aquatic systems. All measures must be taken to ensure this product does not come into contact with any water sources, drains and sewer systems.

STYRENE:
Algae
EC50 = 1.4 mg/L (Pseudokirchneriella subcapitata) (72h)
EC50 0.46 - 4.3 mg/L (Pseudokirchneriella subcapitata) (72h)

Fish
LC50 3.24 - 4.99 mg/L (Pimephales promelas) (96 h) flow-through
LC50 19.03 - 33.53 mg/L (Lepomis macrochirus) (96 h) static
LC50 6.75 - 14.5 mg/L (Pimephales promelas) (96 h) static
LC50 58.75 - 95.32 mg/L (Poecilia reticulata) (96 h) static

12.2 Persistence and degradability
Non biodegradable.

12.3 Bioaccumulative potential
No data available.

12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment
Not required. No ingredient considered persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects
Effect on ozone layer: No known effects from this product.
Effect on global warming: No known effects from this product.

13. Disposal Considerations

Disposal methods must comply with all local and national legislation. It is advised that a professional waste disposal company is used at all times.

14. Transport Information

Road and Rail
Non Dangerous Goods:
Not classified as Dangerous Goods by the criteria of the South African National Road Traffic Act 1996 Section 54.

Marine / Waterways
Non Dangerous Goods:
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for the transportation by sea.

Air
Non Dangerous Goods:
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulation for transport by air.

15. Regulatory Information

Named Ingredients	: Unsaturated Polyester Resin.
ECC Hazard Classification	: Flammable, harmful, Irritant (R10,Xn,Xi).
Risk Phrases	: Flammable, Harmful by inhalation, irritating to eyes and skin (R:10,20,36/38).
Safety Phrases	: Do not breath vapour (S:23).

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EC Directives

Restrictions related to the product or contained substances in accordance with Annex XVII to EC Regulation 1907/2006.

Dangerous Substances Directive: 67/548/ECC and adaptations.

Dangerous Preparations Directive: 88/379/EEC.

Statutory Instruments

Hazardous Substances act no. 15 of 1973 and regulations.

OHS act 1993 and regulations.

Mine Health and Safety act no. 29 of 1996 and regulations.

National Environmental Management act no. 107 of 1998 and regulations.

SANS 10234:2008 Globally Harmonized System of classification and labelling of chemicals (GHS)

Codes of Practice

Quality Management System ISO 9001:2015.

Environment Management System ISO 14001:2015.

Occupational Health & Safety ISO 45001:2018.

16. Other Information

RocLoc® is a trademark of RSC Ekusasa Mining Joint Venture (Pty) Ltd.

It is the responsibility of the purchaser to inform any person handling or using this product of the information contained within this document and to ensure that all the recommended precautionary advices are put into practice.

This product is only to be used for the stated application. It is to be noted that any risks resulting from using this product for any other purpose other than the stated purpose are not covered within this document.

This document does not substitute the users own assessment of workplace risk and product suitability, as required by any health and safety legislation.

Indication of changes

Revised Safety Data Sheet in accordance with SANS 10234:2008 and EU Regulation 453/2010.

16.1 Other information

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Contact Author of current issue: jill.piroddi@rscekusasa.co.za

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