

**Anchor Resin (Resin Component) MATERIAL SAFETY DATA SHEET****1. Manufacturer Details**

Product Name: ANCHOR RESIN  
 Application: Resin based pourable anchor system  
 Company: Rocbolt Technologies (Pty) Ltd  
 Address: 42 Steel Rd., Spartan  
 P.O. Box 15, Isando, 1600  
 Telephone: (011) 970 - 1643  
 Fax: (011) 970 - 3596

**2. Identification of the Substance/Preparation**

Name: ANCHOR RESIN (RESIN COMPONENT)  
 Code: N/A  
 CAS no: (Xn; Cas no. 100-42-5 < 12.5% )  
 EC no. : N/A  
 UN No.: EAC: 127 Hazchem: 3[Y]E  
 Kemler: 33 SAPMA: 2-H-E

**3. Composition/Information on Ingredients**

[- R10][Xn R20][Xi R36/38]

EC Classification: - Xn R10, 20, 36/38 S02, 13, 26, 43A, 46, 51

HAZARDOUS AND/OR OTHER RELEVANT COMPONENTS

STYRENE >12.5%

[CAS #: 100-42-5] [E.C. #: 601-026-00-0]

EEC Labels: XN OEL 420mg OEL 100ppm STOEL 1050mg STOEL 250ppm CL+ S

(CL/RL = Controlled/Recommended level 'S' = Skin annotation)

**4. Hazards Identification**

SAPMA Health Rating: 2-MODERATE - Temporary or minor injury possible even if treatment given

Inhalation: HARMFUL. Excessive exposure to this material must be avoided.

Skin: Highly irritating. Risk of dermatitis. May be absorbed through intact skin.

Eyes: Irritating - may cause damage if not given prompt attention.

Ingestion: Harmful if swallowed. Can affect CNS. Systemic poison.

No carcinogenic, mutagenic or genetic effects established

Medium to long term environmental effects. Contain, collect & remove.

**5. First Aid Measures**

Inhalation: Move to fresh air. In case of discomfort seek medical attention.

Skin: Drench with water. Remove contaminated clothing. Use a skin cleaner. In severe cases refer to Doctor.

Eyes: Rinse well with water and seek medical advice if discomfort persists.

Ingestion: Wash mouth with plenty of water. Do NOT induce vomiting. Seek medical advice.

**6. Fire Fighting Measures**

Flammable with toxic fumes. Potential for spontaneous combustion.

Containers can burst in a fire. Can form explosive vapour/air mixture. Static discharge hazard!

Foam. CO2. Dry powder. Fog to cool and control. Do NOT use water jets.

Cool containers in case of fire.

**7. Accidental Release Measures - See also Sections 5, 8, 13**

Contain & Collect. Use inert, NOT sawdust. Remove waste to safe place - potential for spontaneous combustion.

**8. Handling and Storage**

Store separately from any reactive substances - oxidisers in particular.

No open flames. No smoking.

Keep containers cool. Avoid free fall of liquid - use earthing.

For maximum quality store at or below: 20 °C.

**Anchor Resin (Resin Component) MATERIAL SAFETY DATA SHEET****9. Exposure Controls/Personal Protection**

SAPMA Rating	
2-H-E PPE:	Respirator and Eye protection
Inhalation:	In case of insufficient ventilation, use suitable respiratory protection.
Skin:	
AVOID CONTACT.	Use impervious gloves, apron and boots.
Eyes:	Avoid any form of direct contact. Do not touch eyes with dirty hands or gloves.
Ingestion:	Observe the rules of hygiene. Wash before eating, drinking or smoking.
OEL Type:	Mix- Mixture - See Section 2 Skin annotation

**10. Physical and Chemical Properties**

Chemical class:	RESIN SOLUTION
Description:	Viscous liquid
Smell:	Pungent
Boil. Pt (°C):	145°
Flash Point (°C):	32°C

**11. Stability and Reactivity**

Potential for exothermic reaction

Could generate static - USE EARTHING

Potential for spontaneous combustion

Very unstable with heat &/or water

**12. Toxicological Information**

No carcinogenic, mutagenic or genetic effects established

**13. Ecological Information**

Medium to long term environmental effects. Contain, collect & remove.

**14. Disposal Information**

Use reputable waste contractors - potential for spontaneous combustion. Care with used containers.

**15. Transport Information**

UN No.: 1866:	RESIN SOLUTION Contains STYRENE
Packing group:	III
IMO Class:	3.3
Marine Pollutant Class:	1
EAC:	127
Hazchem:	3[Y]E
Kemler:	33

**16. Regulatory Information**

EC no. :	N/A Contains: STYRENE MONOMER
EC Classification: -	Xn R10, 20, 36/38 S02, 13, 26, 43A, 46, 51
R10 -	Flammable
R20 -	Harmful by inhalation
R36/38 -	Irritating to eyes and skin
S2 -	Keep out of reach of children. (Retail sales items)
S13 -	Keep away from food, drink and animal feeding stuffs
S26 -	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S43A -	In case of fire, use water fog, foam or powder - Do not use water jets!
S46 -	If swallowed seek medical advice immediately and show this container or label
S51 -	Use only in well ventilated areas

**17. Other Information**

TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGES.  
IN CASE OF ANY DISCOMFORT ALWAYS SEEK MEDICAL ADVICE.

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 P.O. Box 15, Isando, 1600  
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**2. Identification of the Substance/Preparation**

Name: ANCHOR RESIN (FILLER COMPONENT)  
 Code: N/A

**Chemical description**

(Dibenzoyl peroxide, powder, 75% with water) - Less than 1%

Mixed with other inert fillers/limestones - more than 99%

**3. Composition/Information on Ingredients**

Composition / information on peroxide

Number % w/w CAS-number Chemical name

1 75.0 000094-36-0 Dibenzoyl peroxide

Annex-1 number EC-number Symbol(s)  
 Risk-phrase(s)

1 617-008-00-0 202-327-6 E Xi R02 R36 R43

Other information

Balance of peroxide component: non-hazardous ingredients

Mixture is less than 1% peroxide powder with more than 99% inert filler.

**4. Hazards Identification**

Risk of explosion by shock, friction, fire or other sources of ignition. May cause fire.  
 Irritating to eyes. May cause sensitization by skin contact.

**5. First Aid Measures****Symptoms and effects**

Irritating to eyes. May cause sensitization by skin contact. Dust may be irritating to the respiratory tract and cause symptoms of bronchitis.

**First aid****General**

In all cases of doubt, or when symptoms persist, seek medical attention.

**Inhalation**

Move to fresh air, rest, half upright position, loosen clothing.

**Skin**

Remove all contaminated clothing immediately. Wash off with plenty of soap and water. Seek medical advice if irritation develops. Launder clothes before reuse.

**Eye**

Rinse immediately and as long as possible with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.

**Ingestion**

Rinse mouth with water. Do NOT induce vomiting. Call a physician immediately!

**Advice to physician**

Symptomatic treatment is advised.

**6. Fire Fighting Measures****Extinguishing media**

Carbon dioxide, dry chemical powder, dry sand, water, foam.

**Unsuitable extinguishing media**

Halones.

**Hazardous decomposition/combustion products**

Carbon dioxide, Carbon monoxide, Benzoic acid, Benzene.

**Protective equipment**

Wear suitable protective clothing. Wear self-contained breathing apparatus.

**Other information**

Extinguish a small fire with powder or carbon dioxide then apply water to prevent re-ignition. Cool closed containers with water.

**Fire and explosion hazard**

CAUTION: re-ignition may occur. Decomposition under effect of heating. If involved in a fire, it will support combustion. In case of fire and/or explosion do not breathe fumes.

# Anchor Resin (Filler Component) MATERIAL SAFETY DATA SHEET

## 7. Accidental Release Measures

### Personal precautions

Do not breathe dust. Avoid contact with skin and eyes. For personal protection see Section 8.

### Environmental precautions

Do not allow to enter drains or water courses.

### Methods for cleaning up

Eliminate all sources of ignition, and do not generate flames or sparks. First moisten with water. Sweep up with dustpan and brush off inert material, flushing the remainder with water. Avoid dust generation. Sweep up with dustpan and brush off inert material, flushing the remainder with water. Avoid dust generation. Keep contents moist. The waste should NOT be confined.

### Other information

CAUTION: re-ignition may occur.

## 8. Handling and Storage

### Handling

Never weigh out in the storage room. When using do not eat, drink or smoke. Do not breathe dust. Handle in well ventilated areas. Eliminate all sources of ignition, and do not generate flames or sparks. Keep away from reducing agents (e.g. amines), acids, alkalis and heavy metal compounds (e.g. accelerators, driers, metal soaps). Keep product and emptied container away from heat and sources of ignition. Confinement must be avoided. Do not allow to dry out. Avoid shock and friction. Avoid contact with skin and eyes.

### Storage requirements

Store in accordance with local/national regulations. Keep away from food, drink and animal feeding stuffs. Store in a dry well ventilated place away from sources of heat and direct sunlight. Keep only in the original container.

### Storage

For maximum quality store at or below: 20 °C.

### Other information

It is recommended to use electrical equipment of temperature group T3. However, auto-ignition can never be excluded. Wash hands thoroughly after handling or contact. Keep working clothing separately and do not take them home

## 9. Exposure Controls/Personal Protection

### Engineering controls

Ensure good ventilation and local exhaustion of the working area. Explosion proof ventilation recommended.

### Personal protection

#### Respiratory

Provide adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment (respirator with Filter P1).

#### Hand

Wear suitable protective gloves of neoprene or synthetic rubber.

#### Eye

Wear eye/face protection. A face shield is preferred over goggles.

#### Skin and body

Wear suitable protective clothing.

#### Other information

Launder clothes before reuse.

#### Dibenzoyl peroxide

Time Weighted Average (TWA) 5.0 mg/m<sup>3</sup>

## 10. Physical and Chemical Properties

### Appearance and Odour

Powder (granules) blue

Odour: faint

### Boiling point/range

Do not distil (Decomposes)

### Melting point/range

Pure BPO 103 °C

### Flash point

Not determined

### Flammability

Not determined

### Explosive properties

Yes

### Oxidizing properties

Not applicable

### Vapour pressure

Not determined

### Density

Not determined

### Bulk density

Approx. 630 kg/m<sup>3</sup>

### Solubility in water

Insoluble

### Solubility in other solvents

Soluble in aromatic solvents  
pure phthalates

### pH value

Neutral character

### Partition coefficient

n-octanol/water

Not determined

### Relative vapour density (air=1)

Not determined

### Viscosity

Not applicable

### Active oxygen content

4.83-4.96 %

### Peroxide content

75 %

### Auto-ignition temperature

Test method not applicable.  
(See Section 8)

### SADT

80 °C. See also Section 11.

### Explosion limits

Not applicable

### Specific conductivity

Not determined

## 11. Stability and Reactivity

### Stability

SADT - (Self accelerating decomposition temperature) is the lowest temperature at which self-accelerating decomposition may occur with a substance in the packaging as used in transport.

**Anchor Resin (Filler Component)** MATERIAL SAFETY DATA SHEET

A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the following temperature: 80 °C. Contact with incompatible substances can cause decomposition at or below the SADT 80 °C.

**Conditions to avoid**

To maintain quality store in original closed container below: 40 °C.

Avoid shock and friction. Confinement must be avoided. Do not allow to dry out. Peroxide is explosive when dry.

**Incompatibilities**

Avoid contact with rust, iron and copper. Contact with incompatible materials such as acids, alkalis, and heavy metals and reducing agents will result in hazardous decomposition. Do not mix with peroxide accelerators. Use only Stainless steel 316, PVC, polyethylene or glass-lined equipment.

**Decomposition**

Benzoic acid, Benzene.

**Other information**

Emergency procedures will vary depending on conditions. The customer must have an emergency response plan in place.

**12. Toxicological Information****Dibenzoyl peroxide, 78 %****Acute toxicity****Oral LD50**

Rat :> 5000 mg/kg

**Inhalation LC50**

Rat :> 24.3 mg/l; 4 hours exposure time max. attainable concentration

**Irritation****Skin**

Non-irritating (4 hour's exposure time)

**Eye**

Moderately irritating

**Sensitization**

Sensitization possible by skin contact

**Genotoxicity**

Ames test: Not mutagenic

**13. Ecological Information****Dibenzoyl peroxide, 78 % Eco toxicity Fish**

Acute toxicity, 96h-LC50 = 2.0 mg/l.  
(Poecilia reticulata)

**Daphnia**

48 h-EC50: 2.91 mg/l

**Bacteria**

Activated sludge respiration inhibition test EC50 = 35 mg/l.

**Fate Degradation Biotic**

Readily biodegradable (Closed bottle test).

**14. Disposal Information****Product**

Waste disposal in accordance with regulations

**Contaminated packaging**

According to local regulations.

**15. Transport Information**

Land transport (ADR/ RID) and / or DOT

Class	5.2
Classification Code	P1
RID class	5.2
Substance Identification No.	3104
TREM-Card or ERG Number	CEVIC TEC(R) - 52GP1-S
UN number	3104
Proper Shipping Name	Limestone filler containing <1% ORGANIC PEROXIDE TYPE C, SOLID; (Dibenzoyl peroxide)
Required labels	5.2 Sea transport (IMDG-code/ IMO)
Class	5.2
UN number	3104
EMS	F-J, S-R
Marine pollutant	No
Other information	Label(s); 5.2 Air transport (ICAO-TI/ IATA-DGR)
UN number	3104
Class	5.2
Proper Shipping Name	Organic peroxide type containing
Other information	Label(s); 5.2

**16. Regulatory Information****Chemical description**

Limestone filler containing <1% (Dibenzoyl peroxide, powder, 75% with water)

**Labelling according to EC directives EC-number**

Not applicable

**R(isk) phrase(s) Code Description**

R02. Risk of explosion by shock, friction, fire or other sources of ignition.

# **Anchor Resin (Filler Component)** MATERIAL SAFETY DATA SHEET

R36. Irritating to eyes.  
R43. May cause sensitization by skin contact.  
S(afety) phrase(s)  
Code Description  
S03/07. Keep container tightly closed in a cool place.  
S14B. Keep away from reducing agents (e.g. amines), acids, alkalis and heavy  
Metal compounds (e.g. accelerators, driers, metal soaps).  
S22. Do not breathe dust.  
S26. In case of contact with eyes, rinse immediately with plenty of water and seek  
Medical advice.  
S36/37/39. Wear suitable protective clothing, gloves and eye/face protection.

## **Other information**

Substance and/or product listed in Directive 96/82/EC.

## **17. Other Information**

R-phrases information (Dibenzoyl Peroxide)  
Chemical name Dibenzoyl peroxide  
R(isk) phrase(s): R02 R36 R43 Risk of explosion by shock, friction, fire or other sources of ignition  
Irritating to eyes May cause sensitization by skin contact.

## **18: General**

This Anchor Resin MSDS (Resin and filler) was derived combining the root material MSDS's and it should be noted that the Peroxide component forms a very small part (less than 1%) of the end product.

The data and advice given in this document apply when the product is used for the stated purpose or application. The product is not suitable for any other application, and use of this product for any other application may give rise to risks not covered in this document. If in doubt as to the intended application, or use in other applications is considered, the advice of Rocbolt Technologies (Pty) Ltd. should first be sought. If the product has been purchased for supply to a third party, it is the purchaser's duty to ensure that any person handling or using the product is provided with the information in this document. It is the responsibility and duty of the employer to inform employees (or others who may be affected) of the hazards described in this document and the precautions that should be taken. This document does not constitute or substitute for the users own assessment of workplace risk as required by other health and safety legislation.

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