Revision Date 21/08/12

Supersedes date 20/10/10

SAFETY DATA SHEET
ARBOKOL 1000

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name ARBOKOL 1000

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Sealant.

1.3. Details of the supplier of the safety data sheet

Supplier

Adshead Ratcliffe & Co. Ltd.
Derby Road, Belper
Derbyshire.
DE56 1WJ
Tel. (+44) 01773 826661
Fax. (+44) 01773 821215
sds@arbo.co.uk

1.4. Emergency telephone number

(+44) 01773 826661 (office hours only)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) R43. R52/53.

2.2. Label elements

Contains EPOXY RESIN (Number average MW 700 - 1200)

Labelling

Irritant

Risk Phrases

R43	May cause sensitisation by skin contact.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases

S24	Avoid contact with skin.
S60	This material and its container must be disposed of as hazardous waste.
S37	Wear suitable gloves.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

LIQUID POLYSULPHIDE POLYMER with thiol end groups (MW >1800)	25 - 50%
CAS-No.: 68611-50-7 EC No.:	
Classification (EC 1272/2008) Aquatic Chronic 3 - H412	Classification (67/548/EEC) R52/53.

BARIUM OXIDE obtained by calcining witherite		1 - 5%
CAS-No.: 1304-28-5	EC No.: 215-127-9	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Corr. 1B - H314	Xn;R20/22. C;R34.

CALCIUM PEROXIDE		1 - 5%
CAS-No.: 1305-79-9	EC No.: 215-139-4	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Ox. Liq. 2 - H272 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335	Xi;R36/37/38. O;R8.

EPOXY RESIN (Number average MW 700 - 1200)		1 - 5%
CAS-No.: 25036-25-3	EC No.:	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317	Xi;R36/38. R43.

2-MERCAPTOETHANOL		< 1%
CAS-No.: 60-24-2	EC No.: 200-464-6	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 2 - H330	T;R23/24/25.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition Comments

Polysulphide polymer, fillers, plasticiser and auxiliaries. and barium oxide.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

In all cases of doubt, or if symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation

Fresh air. Get medical attention if any discomfort continues.

Ingestion

Immediately rinse mouth and drink plenty of water (200-300 ml). Give milk instead of water if readily available. Get medical attention if any discomfort continues.

Skin contact

Wipe off excess material with cloth or paper. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

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

Inhalation.

No specific symptoms noted.

Ingestion

May cause discomfort if swallowed.

Skin contact

Prolonged skin contact may cause redness and irritation. Allergic rash.

Eye contact

May cause temporary eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Unusual Fire & Explosion Hazards

Not known.

Specific hazards

Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO_2). Hydrogen sulphide (H_2S). Sulphurous gases (SO_x). Formaldehyde

5.3. Advice for firefighters

Special Fire Fighting Procedures

Keep run-off water out of sewers and water sources. Dike for water control.

Protective equipment for fire-fighters

Wear self contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid contact with skin and eyes.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Wear necessary protective equipment. Collect in containers and seal securely. Clean any slippery coating that remains using a detergent / soap solution or other biodegradable cleaner. Do not contaminate water sources or sewer.

6.4. Reference to other sections

For personal protection, see section 8. See section 11 for additional information on health hazards. The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. See section 12. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Persons susceptible to allergic reactions should not handle this product. Observe good chemical hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place.

Storage Class

Miscellaneous hazardous material storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

Usage Description

Gunnable sealant.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.2. Exposure controls

Protective equipment

Engineering measures

Provide adequate ventilation.

Hand protection

Use protective gloves made of: Polyvinyl chloride (PVC). Nitrile. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection

Use eye protection.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Environmental Exposure Controls

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Uncured -paste. Cured - rubber.
Colour	Misc. colours.
Odour	Aromatic.
Solubility	Insoluble in water
Initial boiling point and boiling range	
Not available.	
Melting point (°C)	Liquid polysulphide polymer: -60°C
Relative density	1.53 - 1.56 @ 20"C
Vapour pressure	Liquid polysulphide polymer: 12.6 hPa @ 20°C
Evaporation rate	Not applicable.
pH-Value, Conc. Solution	Not applicable.
Viscosity	8, 000 - 12, 000 Ps @ 20"C
Odour Threshold, Lower	Not applicable.
Odour Threshold, Upper	Not applicable.
Flash point	Liquid polysulphide polymer: > 230°C
Auto Ignition Temperature (°C)	
Not available.	
Partition Coefficient (N-Octanol/Water)	Not applicable.

Oxidising properties

Does not meet the criteria for oxidising.

9.2. Other information

None.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not known.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time. Liquid polysulhide polymer decomposes at temperatures above 150 C

10.5. Incompatible materials

Materials To Avoid

Strong acids. Strong alkalis. Strong oxidising substances.

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Hydrogen sulphide (H2S). Sulphurous gases (SOx). Formaldehyde. Mercaptan.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxic Dose 1 - LD 50

Liquid polysulphide polymer: >5000 mg/kg (oral rat)

Toxic Dose 2 - LD 50 Liquid polysulphide polymer >7800 mg/kg (dermal rat)

Toxicological information

The product has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly.

Acute toxicity:

Based on available data the classification criteria are not met.

Skin Corrosion/Irritation:

Based on available data the classification criteria are not met.

Respiratory or skin sensitisation:

Sensitising.

Germ cell mutagenicity:

Does not contain any substances known to be mutagenic.

Carcinogenicity:

Does not contain any substances known to be carcinogenic.

Reproductive Toxicity:

Based on available data the classification criteria are not met.

Aspiration hazard:

Not relevant, due to the form of the product.

Inhalation

No specific health warnings noted.

Ingestion

No harmful effects expected in amounts likely to be ingested by accident.

Skin contact

May cause sensitisation by skin contact.

Eye contact

May cause temporary eye irritation.

Medical Considerations

Skin disorders and allergies.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.1. Toxicity

LC 50, 96 Hrs, Fish mg/l	Liquid polysulphide polymer: 1000
EC 50, 48 Hrs, Daphnia, mg/l	Liquid polysulphide polymer: 1160

12.2. Persistence and degradability

Degradability

Product contains: Polysuphide polymer: which is: Poorly biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient	Not applicable.

12.4. Mobility in soil

Mobility:

The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

Waste Class

H13 - Sensitising

H14 - Ecotoxic

Recommended EWC Code 08 04 09*

SECTION 14: TRANSPORT INFORMATION

General	The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

No information required.

14.2. UN proper shipping name

No information required.

14.3. Transport hazard class(es)

No information required.

14.4. Packing group

No information required.

14.5. Environmental hazards

14.6. Special precautions for user

No information required.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information required.

SECTION 15: REGULATORY INFORMATION

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

Uk Regulatory References

Chemicals (Hazard Information & Packaging) Regulations.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Dangerous Preparations Directive 1999/45/EC. Regulation (EC) 1907/2006 REACH. Regulation (EC) 1272/2008 CLP.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Comments

New format as required by REACH Annex II

Revision Date	21/08/12
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SDS No.	10157

Risk Phrases In Full

R34	Causes burns.
R8	Contact with combustible material may cause fire.
R20/22	Harmful by inhalation and if swallowed.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R36/38	Irritating to eyes and skin.
R36/37/38	Irritating to eyes, respiratory system and skin.
R43	May cause sensitisation by skin contact.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.

Hazard Statements In Full

H319	Causes serious eye irritation.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H302	Harmful if swallowed.
H412	Harmful to aquatic life with long lasting effects.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H272	May intensify fire; oxidiser.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.