Revision Date 30/07/12 Supersedes date 20/04/10



SAFETY DATA SHEET ARBOKOL 682 BASE

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

1.1. Product identifier

Product name

ARBOKOL 682 BASE

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

Identified uses

Base component of: Two component epoxy based adhesive.

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) N;R51/53.

Human health

Not considered as a health hazard under current legislation.

Environment

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

2.2. Label elements

Labelling

Risk Phrases

Safety Phrases



Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheets.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

S60

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3.2. Mixtures

LIQUID POLYSULPHIDE POLYMER	with thiol end groups (MW < 18	300)	30-60%
CAS-No.: 68611-50-7	EC No.:		
Classification (EC 1272/2008) Aquatic Chronic 2 - H411		Classification (67/548/EEC) N;R51/53.	
2,4,6-TRIS(DIMETHYLAMINOMETHY	/L)PHENOL		5-10%
CAS-No.: 90-72-2	EC No.: 202-013-9		
Classification (EC 1272/2008) Acute Tox. 4 - H302 Skin Irrit. 2 - H315		Classification (67/548/EEC) Xn;R22 Xi;R36/38	

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

Composition Comments

Polysulphide polymer, with phenolic amine, fillers, and auxiliaries.

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

Move the exposed person to fresh air at once. 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. Skin contact

Wipe off excess material with cloth or paper. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

Inhalation. No specific symptoms noted. Ingestion May cause discomfort if swallowed. Skin contact No specific symptoms noted. Eye contact May cause temporary eye irritation. **4.3. Indication of any immediate medical attention and special treatment needed**

No specific first aid measures noted.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media Water spray. Foam, carbon dioxide or dry powder. 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 No unusual fire or explosion hazards noted. Specific hazards In fire product may form: Sulphurous gases (SOx). Hydrogen sulphide (H2S). Nitrous gases (NOx). Carbon monoxide (CO). Carbon dioxide (CO2). **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

Follow precautions for safe handling described in this safety data sheet. Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Wear necessary protective equipment. Collect in containers and seal securely. Flush area with water. Do not contaminate water sources or sewer.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. 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. 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 / adhesive.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Ingredient Comments No exposure limits noted for ingredient(s). No DNEL or PNEC limits available.

8.2. Exposure controls

Protective equipment



Engineering measures

Provide adequate ventilation.

Hand protection

Use protective gloves. 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

Wear approved safety goggles.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes 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	Paste.
Colour	Black.
Odour	Unpleasant.
	Mercaptan
Solubility	Insoluble in water
Initial boiling point and boiling range	
Not applicable.	
Melting point (°C)	
Not applicable.	
Relative density	1.25 @ 20"C
Vapour density (air=1)	0
Not applicable.	
Vapour pressure	
Not applicable.	
Evaporation rate	
Not applicable.	
pH-Value, Conc. Solution	
Not applicable.	
Viscosity	7, 500 - 10, 000 Ps @ 20"C
Solubility Value (G/100G H2O@20°C	C)
Not applicable.	
Decomposition temperature (°C)	
Not determined.	
Odour Threshold, Lower	
No information available.	
Odour Threshold, Upper	
No information available.	
Flash point	
Not applicable.	
Auto Ignition Temperature (°C)	
Not applicable.	
Flammability Limit - Lower(%)	
Not applicable.	
Flammability Limit - Upper(%)	
Not applicable.	
Partition Coefficient	
(N-Octanol/Water) Not applicable.	
Explosive properties	
Not applicable.	
Other Flammability	
Not applicable.	
Oxidising properties	
Not applicable.	
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.

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. Sulphur dioxide. Hydrogen sulphide (H2S). Formaldehyde. Mercaptan.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxic Dose 1 - LD 50

Polysulphide ploymer: >5000 mg/kg (oral rat)

Toxic Dose 2 - LD 50 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.

<u>Skin Corrosion/Irritation:</u> Based on available data the classification criteria are not met.

<u>Respiratory or skin sensitisation:</u> Based on available data the classification criteria are not met.

<u>Germ cell mutagenicity:</u> Does not contain any substances known to be mutagenic.

<u>Carcinogenicity:</u> Does not contain any substances known to be carcinogenic.

Reproductive Toxicity: Based on available data the classification criteria are not met.

<u>Specific target organ toxicity - single exposure:</u> Not classified as a specific target organ toxicant after a single exposure.

<u>Specific target organ toxicity - repeated exposure:</u> Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard:

Not relevant, due to the form of the product.

Inhalation

Not relevant at normal room temperatures. When heated, toxic vapours may be formed.

Ingestion May cause discomfort if swallowed.

Skin contact Skin irritation is not anticipated when used normally. Eye contact May cause temporary eye irritation. Health Warnings No specific health warnings noted.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

LC 50, 96 Hrs, Fish mg/l	Polysulphide polymer: >1000 mg/l (Cyprinodon variegatus)
EC 50, 48 Hrs, Daphnia, mg/l	Polysulphide polymer: 4.71 mg/l
IC 50, 72 Hrs, Algae, mg/l	Polysuphide polymer: <100 mg/l (Selenastrum capricornutum)

12.2. Persistence and degradability

Degradability Polysuphide polymer: 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.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Waste Class H14 - Ecotoxic Recommended EWC Code 08 04 09*

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SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	3077
UN No. (IMDG)	3077
UN No. (ICAO)	3077

14.2. UN proper shipping name

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

14.3. Transport hazard class(es)

ADR/RID/ADN Class

ADR/RID/ADN Class

IMDG Class

ICAO Class/Division

Transport Labels

Class 9: Miscellaneous dangerous substances and articles.

9 9



14.4. Packing group

ADR/RID/ADN Packing group	III
IMDG Packing group	III
ICAO Packing group	ш

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant



14.6. Special precautions for user

EMS	None
Hazard No. (ADR)	90 Environmentally hazardous substance; miscellaneous dangerous substances.
Tunnel Restriction Code	(E)

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

Not applicable.

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 I	REACH Annex II
Revision Date	30/07/12
Supersedes date	20/04/10
SDS No.	10169
Risk Phrases In Full	
R22	Harmful if swallowed.
R36/38	Irritating to eyes and skin.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements In Full	
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H302	Harmful if swallowed.
H411	Toxic to aquatic life with long lasting effects.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in a process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.