Revision Date 19/11/12

Supersedes date 24/11/09



SAFETY DATA SHEET

ARBOKOL AG2 BASE - HOME MARKET GRADE

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

1.1. Product identifier

| Product name | ARBOKOL AG2 BASE - HOME MARKET GRADE |
|--------------|--------------------------------------|
| rioddothanie | |

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

Identified uses

Base component of: A two-part 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) Not classified.

Human health

Not considered as a health hazard under current legislation.

Environment

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

2.2. Label elements

Risk Phrases

Safety Phrases

P13

Safety data sheet available for professional user on request.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

NC

3.2. Mixtures

LIQUID POLYSULPHIDE POLYMER with thiol end groups (MW >1800)

Not classified.

| | ARBOKOL AG2 BASE - | HOME MARKET GRADE |
|---|--------------------------------------|---|
| CAS-No.: 68611-50-7 | EC No.: | |
| Classification (EC 1272/2008) | | Classification (67/548/EEC) |
| Aquatic Chronic 3 - H412 | | R52/53. |
| The Full Text for all R-Phrases and Ha | zard Statements are Displayed in Se | ection 16. |
| Composition Comments | | |
| Polysulphide polymer, with fillers, plas | sticiser and auxiliaries. | |
| SECTION 4: FIRST AID MEAS | SURES | |
| 4.1. Description of first aid measure | es | |
| General information | | |
| In all cases of doubt, or if symptoms p | ersist, seek medical attention. Neve | er give anything by mouth to an unconscious person. |
| Inhalation | | |
| If inhalation causes adverse effects, re | move to fresh air. | |
| Ingestion | | |
| Immediately rinse mouth and drink pler | nty 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 p | aper. Wash the skin immediately wi | th 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 eyes wide apart. 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 me | edical attention and special treat | ment needed |
| Treat Symptomatically. | | |
| SECTION 5: FIREFIGHTING | /EASURES | |
| 5.1. Extinguishing media | | |

Extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

None known.

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 case of fire, toxic gases may be formed. Carbon monoxide (CO). Carbon dioxide (CO2). Sulphur dioxide. Hydrogen sulphide (H2S).

5.3. Advice for firefighters

Special Fire Fighting Procedures

Avoid breathing fire vapours. Keep up-wind to avoid fumes.

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 appropriate protective clothing. Follow precautions for safe handling described in this safety data sheet.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Shovel into dry containers. Cover and move the containers. Flush the area with water. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

For personal protection, see section 8. See section 11 for additional information on health hazards. 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

Unspecified 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

Ingredient Comments

No DNEL or PNEC values available.

8.2. Exposure controls

Protective equipment



Engineering measures No particular ventilation requirements. Respiratory equipment Not normally required. Hand protection Use suitable protective gloves if risk of skin contact. Eye protection

Not generally required.

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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| Appearance | Paste. |
|---|--------------------------|
| Colour | Cream. |
| Odour | Mercaptan |
| Solubility | Insoluble in water |
| Initial boiling point and boiling range | Not applicable. |
| Melting point (°C) | Not applicable. |
| Relative density | 1.48 - 1.55 @ 20"C |
| Vapour density (air=1) | Not applicable. |
| Vapour pressure | Not applicable. |
| Evaporation rate | Not applicable. |
| pH-Value, Conc. Solution | Not applicable. |
| Viscosity | 11, 500 - 13, 500 @ 20"C |
| Solubility Value (G/100G | Not applicable. |
| H2O@20°C) | |
| Decomposition temperature (°C) | Not determined. |
| Odour Threshold, Lower | Not applicable. |
| Odour Threshold, Upper | Not applicable. |
| Flash point | Not determined. |
| Auto Ignition Temperature (°C) | Not applicable. |
| Flammability Limit - Lower(%) | Not applicable. |
| Flammability Limit - Upper(%) | Not applicable. |
| Partition Coefficient | Not applicable. |
| (N-Octanol/Water) | |
| Explosive properties | Not applicable. |
| Oxidising properties | Not applicable. |
| 9.2. Other information | |
| None | |

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 applicable.

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

Fire creates: Toxic gases/vapours/fumes of: Carbon dioxide (CO2). Carbon monoxide (CO). Sulphurous gases (SOx). Hydrogen sulphide (H2S).

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) Toxic Conc. - LC 50 Not determined 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. Serious eye damage/irritation: Based on available data the classification criteria are not met. Respiratory or skin sensitisation: Based on available data the classification criteria are not met. Germ cell mutagenicity: Does not contain any substances known to be mutagenic. Carcinogenicity: Does not contain any substances known to be carcinogenic. Reproductive Toxicity: Does not contain any substances known to be toxic to reproduction. Inhalation No specific health warnings noted. Indestion No harmful effects expected in amounts likely to be ingested by accident. Skin contact Skin irritation is not anticipated when used normally.

Eye contact

May cause temporary eye irritation. Will not injure eye tissue.

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

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

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

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

Recommended EWC Code 08 04 10

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

Environmentally Hazardous Substance/Marine Pollutant No.

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. |
| Statutory Instruments |
| Control of Substances Hazardous to Health. |
| Guidance Notes |
| Workplace Exposure Limits EH40. |
| EU Legislation |

Dangerous Substance Directive 67/548/EEC. 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 | | |
|---|---|--|
| General review New format as required by REACH Annex II | | |
| Revision Date | 19/11/12 | |
| Supersedes date | 24/11/09 | |
| SDS No. | 10227 | |
| Safety Data Sheet Status | Approved. | |
| Risk Phrases In Full | | |
| R52/53 | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. | |
| NC | Not classified. | |
| Hazard Statements In Full | | |
| H412 | Harmful 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.