



SAFETY DATA SHEET ARBO MIRROR ADHESIVE

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

1.1. Product identifier

Product name ARBO MIRROR ADHESIVE

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

Identified uses Adhesive. 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

The product contains a small amount of sensitising substance which may provoke an allergic reaction among sensitive individuals in contact with skin.

Environment

The product is not expected to be hazardous to the environment.

2.2. Label elements

Risk Phrases

NC

Not classified.

Safety Phrases

P13

Safety data sheet available for professional user on request.

P14

Contains 3-(2-AMINOETHYLAMINO)-PROPYLTRIMETHOXYSILANE, DIOCTYL TIN BIS(A CETYLACETONATE). May produce an allergic reaction.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

TRIMETHOXY VINYLSILANE	1-5%
CAS-No.: 2768-02-7	EC No.: 220-449-8
Classification (EC 1272/2008) Flam. Liq. 3 - H226 Acute Tox. 4 - H332	Classification (67/548/EEC) Xn;R20. R10.

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BIS(2,2,6,6-TETRAMETHYL-4-PIPERIDYL)SEBACATE		<1%
CAS-No.: 52829-07-9	EC No.: 258-207-9	
Classification (EC 1272/2008) Eye Irrit. 2 - H319 Aquatic Chronic 2 - H411	Classification (67/548/EEC) Xi;R36. N;R51/53.	

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

Composition Comments

Silyl-terminated polyether, with fillers, organosilane additives, 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. DO NOT induce vomiting. Get medical attention immediately.

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately 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

Allergic rash.

Eye contact

Prolonged contact may cause redness and/or tearing.

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

See Section 4.1

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 case of fire, toxic gases may be formed.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Not known.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

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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

Do not discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Transfer to a container for disposal. 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

DNEL and PNEC values given for Trimethoxyvinyl silane

DNEL

Industry	Dermal	Long Term	Systemic Effects	0.69 mg/kg/day
Industry	Inhalation.	Long Term	Systemic Effects	4.9 mg/m3
Consumer	Dermal	Short Term	Systemic Effects	26.9 mg/kg/day
Consumer	Inhalation.	Short Term	Systemic Effects	93.4 mg/m3
Consumer	Dermal	Long Term	Systemic Effects	0.3 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	1.04 mg/m3
Consumer	Oral	Long Term	Systemic Effects	0.3

PNEC

Freshwater	0.34	mg/l
Marinewater	0.034	mg/l
Intermittent release	3.4	mg/l
STP	110	mg/l
Sediment (Freshwater)	1.24	mg/kg
Sediment (Marinewater)	0.12	mg/kg
Soil	0.052	mg/kg

8.2. Exposure controls

Protective equipment



Engineering measures

Provide adequate ventilation.

Respiratory equipment

Not normally required.

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.

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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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Thixotropic paste.
Colour	White / off-white.
Odour	Mild (or faint).
Solubility	Insoluble in water
Initial boiling point and boiling range	
Not applicable.	
Melting point (°C)	
Not applicable.	
Relative density	1.43 - 1.53 @ 20°C
Vapour density (air=1)	
Not applicable.	
Vapour pressure	
Not applicable.	
Evaporation Factor	
Not applicable.	
pH-Value, Conc. Solution	
Not applicable.	
pH-Value, Diluted Solution	
Not applicable.	
Viscosity	6, 000 - 10, 000 Ps @ 20°C
Solubility Value (G/100G H ₂ O@20°C)	
Not applicable.	
Decomposition temperature (°C)	
Not applicable.	
Odour Threshold, Lower	
Not applicable.	
Odour Threshold, Upper	
Not applicable.	
Flash point	Not determined.
Auto Ignition Temperature (°C)	~ 400
Flammability Limit - Lower(%)	
Not applicable.	
Flammability Limit - Upper(%)	
Not applicable.	
Explosive 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

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Avoid excessive heat for prolonged periods of time. moisture

10.5. Incompatible materials

Materials To Avoid

No specific, or groups of materials are likely to react to produce a hazardous situation.

10.6. Hazardous decomposition products

In case of fire, toxic gases (CO, CO₂, NO_x) may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxic Dose 1 - LD 50

Trimethoxyvinylsilane 7.34 - 7.46 mg/kg (oral rat)

Toxic Dose 2 - LD 50

Bis-(2, 2, 6, 6-Tetramethyl-4-piperidiny) Sebacate 3700 mg/kg (oral rat)

Toxic Conc. - LC 50

Trimethoxyvinylsilane 16.79 mg/l/4h (inh-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:

The product contains a small amount of a sensitising substance which may cause an allergic reaction in sensitive individuals.

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.

Ingestion

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

Skin contact

The product contains a small amount of sensitising substance which may provoke an allergic reaction among sensitive individuals after repeated contact.

Eye contact

May cause temporary eye irritation.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/ EC and classified for ecotoxicological hazards accordingly. In cross-linked state not soluble in water. Easily separable from water by filtration.

12.1. Toxicity

There are no data for the product.

Acute Toxicity - Fish

LC50 96 hours Trimethoxyvinylsilane 191 mg/l Onchorhynchus mykiss (Rainbow trout)

LC50 96 hours Bis-(2, 2, 6, 6-Tetramethyl-4-piperidiny) Sebacate 13 mg/l Onchorhynchus mykiss (Rainbow trout)

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Acute Toxicity - Aquatic Invertebrates

EC50 48 hours Trimethoxyvinylsilane >100 mg/l Daphnia magna

EC50 48 hours Bis-(2, 2, 6, 6-Tetramethyl-4-piperidiny) Sebacate 17 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

EC50 72 hours Trimethoxyvinylsilane >100 mg/l Freshwater algae

EC50 72 hours Bis-(2, 2, 6, 6-Tetramethyl-4-piperidiny) Sebacate 1.9 mg/l Scenedesmus subspicatus

Acute Toxicity - Microorganisms

EC50 3 hours Bis-(2, 2, 6, 6-Tetramethyl-4-piperidiny) Sebacate >100 mg/l Activated sludge

12.2. Persistence and degradability

Degradability

The product is not expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

Bioaccumulation in aquatic organisms is not expected.

12.4. Mobility in soil

Mobility:

Not relevant, due to the form of the product.

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

Do not allow runoff to sewer, waterway or ground.

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.

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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 15/06/12

Supersedes date 25/08/05

SDS No. 10258

Risk Phrases In Full

R10 Flammable.

R20 Harmful by inhalation.

R36 Irritating to eyes.

NC Not classified.

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.

H226 Flammable liquid and vapour.

H332 Harmful if inhaled.

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.