



SAFETY DATA SHEET ARBOTHANE 1245

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

1.1. Product identifier

Product name ARBOTHANE 1245

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) Not classified.

Human health

Not considered as a health hazard under current legislation. The product contains a sensitising substance which may provoke an allergic reaction among sensitive individuals.

Environment

Not considered as an environmental hazard under current legislation.

2.2. Label elements

Risk Phrases

NC Not classified.

Safety Phrases

P4 Contains isocyanates. See information supplied by the manufacturer.
P13 Safety data sheet available for professional user on request.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

XYLENE	5 - 10%
CAS-No.: 1330-20-7	EC No.: 215-535-7
Classification (EC 1272/2008) Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315	Classification (67/548/EEC) R10 Xn;R20/21 Xi;R38

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DISTILLATES (PETROLEUM), HYDROTREATED LIGHT; Kerosine - UNSPECIFIED		1 - <5%
CAS-No.: 64742-47-8	EC No.: 265-149-8	
Classification (EC 1272/2008) Asp. Tox. 1 - H304	Classification (67/548/EEC) Xn;R65	
CALCIUM OXIDE		1 - <5%
CAS-No.: 1305-78-8	EC No.: 215-138-9	
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335	Classification (67/548/EEC) Xi;R37/38,R41.	
ETHYLBENZENE		1 - <5%
CAS-No.: 100-41-4	EC No.: 202-849-4	
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Acute Tox. 4 - H332	Classification (67/548/EEC) F;R11 Xn;R20	
DIPHENYLMETHANE-4,4'-DI-ISOCYANATE		< 0.1%
CAS-No.: 101-68-8	EC No.: 202-966-0	
Classification (EC 1272/2008) Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 Carc. 2 - H351 STOT SE 3 - H335 STOT RE 2 - H373	Classification (67/548/EEC) Xn;R20 R42/43 Xi;R36/37/38	

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

Composition Comments

Polyurethane prepolymers with 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. DO NOT induce vomiting. Get medical attention immediately.

Skin contact

Remove contaminated clothing. Wash skin thoroughly 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 eyes wide apart. Get medical attention if any discomfort continues.

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

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Inhalation.

May cause an asthma-like shortness of breath.

Ingestion

May cause discomfort if swallowed. Nausea, vomiting.

Skin contact

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

No unusual fire or explosion hazards noted.

Specific hazards

In case of fire, toxic gases may be formed. Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrogen cyanide (HCN). Nitrous gases (NO_x). Isocyanates.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Use water to keep fire exposed containers cool and disperse vapours. Avoid breathing fire vapours. Keep up-wind to avoid fumes.

Protective equipment for fire-fighters

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

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 allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Transfer to a container for disposal. Do not seal containers tightly. Reaction with water forming carbon dioxide.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. 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. Avoid inhalation of vapours. Observe good chemical hygiene practices. Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.

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

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8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
DIPHENYLMETHANE-4,4'-DI-ISOCYANATE	WEL		0.02 mg/m3(Sen)		0.07 mg/m3(Sen)	
ETHYLBENZENE	WEL	100 ppm(Sk)	441 mg/m3(Sk)	125 ppm(Sk)	552 mg/m3(Sk)	
XYLENE	WEL	50 ppm(Sk)	220 mg/m3(Sk)	100 ppm(Sk)	441 mg/m3(Sk)	

WEL = Workplace Exposure Limit.

Ingredient Comments

No DNEL or PNEC values available.

8.2. Exposure controls

Protective equipment



Engineering measures

Observe occupational exposure limits and minimize the risk of inhalation of vapours. Provide adequate ventilation.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

Hand protection

Use protective gloves made of: Polyvinyl chloride (PVC).

Eye protection

Not generally required.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin 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	Grey. Buff.
Odour	Mild.
Solubility	Insoluble in water
Initial boiling point and boiling range	137
Melting point (°C)	Not determined.
Relative density	1.15 - 1.19 @ 20°C
Vapour density (air=1)	Not applicable.
Vapour pressure	Not applicable.
Evaporation rate	Not applicable.
Evaporation Factor	Not applicable.
pH-Value, Conc. Solution	Not applicable.
Viscosity	~ 7000 Ps @ 20°C
Solubility Value (G/100G H2O@20°C)	Not applicable.
Decomposition temperature (°C)	Not determined.
Odour Threshold, Lower	Not applicable.
Odour Threshold, Upper	Not applicable.
Flash point	>40 CC (Closed cup)
Auto Ignition Temperature (°C)	>200
Flammability Limit - Lower(%)	0.6
Flammability Limit - Upper(%)	8
Partition Coefficient (N-Octanol/Water)	Not applicable.
Explosive properties	Not considered explosive.

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Oxidising properties

Not applicable.

9.2. Other information

Not known.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Isocyanates react with water to liberate carbon dioxide. Any ingress of moisture into an isocyanate container, whether full or empty, can lead to a pressure build up and subsequent explosion. Reaction with: Acids. Alkalis. Alcohols, glycols. Amines.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time. Avoid contact with: Water, moisture.

10.5. Incompatible materials

Materials To Avoid

Amines. Alcohols, glycols. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

None under normal conditions. In case of fire, toxic gases (CO, CO₂, NO_x) may be formed. Hydrogen cyanide (HCN). Isocyanates.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxic Dose 1 - LD 50

Xylene: 8700 mg/kg (oral rat)

Toxic Dose 2 - LD 50

Diphenylmethane 4, 4' diisocyanate: >15, 000 mg/kg (oral rat)

Toxic Conc. - LC 50

Diphenylmethane 4, 4' diisocyanate: 0.49 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.

Serious eye damage/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.

Aspiration hazard:

Not relevant, due to the form of the product.

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Inhalation

Prolonged or repeated over-exposure to high concentrations of vapours may lead to chronic sensitising effects in sensitive individuals. May cause an asthma-like shortness of breath.

Ingestion

May cause discomfort if swallowed.

Skin contact

Product may cause an allergic reaction in hypersensitive persons.

Eye contact

May cause temporary eye irritation.

Health Warnings

Preparation contains small volumes of isocyanate which may cause allergic reaction and irritation of respiratory system.

Medical Considerations

Chronic respiratory and obstructive airway diseases. Skin disorders and allergies.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Not regarded as dangerous for the 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	Not determined.
EC 50, 48 Hrs, Daphnia, mg/l	Not determined.
IC 50, 72 Hrs, Algae, mg/l	Not determined.

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

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

Not 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).

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General

Not classified for transportation.

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

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.

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 30/11/12

Supersedes date 21/11/07

SDS No. 10273

Risk Phrases In Full

R10	Flammable.
R20/21	Harmful by inhalation and in contact with skin.
R20	Harmful by inhalation.
R65	Harmful: may cause lung damage if swallowed.
R11	Highly flammable
R36/37/38	Irritating to eyes, respiratory system and skin.
R37/38	Irritating to respiratory system and skin.
R38	Irritating to skin.
R42/43	May cause sensitisation by inhalation and skin contact.
NC	Not classified.
R41	Risk of serious damage to eyes.

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Hazard Statements In Full

H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H226	Flammable liquid and vapour.
H332	Harmful if inhaled.
H312	Harmful in contact with skin.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs <<Organs>> through prolonged or repeated exposure.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.

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.