SAFETY DATA SHEET
Arbokol 1025 SP Curing Agent

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name Arbokol 1025 SP Curing Agent

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

Identified uses Curing agent component of: Two part epoxy based sealant.

Uses advised against Restricted to professional users. This product is not intended to be used by the general public.

1.3. Details of the supplier of the safety data sheet

Supplier

Adshead Ratcliffe & Co. Ltd.
Derby Road, Belper
Derbyshire.
DE56 1WJ
T: (+44) 01773 826661
F: (+44) 01773 821215
E: sds.carlisle@ccm-europe.com

1.4. Emergency telephone number

Emergency telephone NPIS (National Poisons Information Service): 0344 892 0111 (for medical professionals only). For medical advice, members of the public should contact NHS 111 in England: 111; NHS 24 in Scotland: 111; NHS Direct in Wales: 111 or 0845 4647. In Northern Ireland: contact your local GP or pharmacist.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

2.2. Label elements

Hazard pictograms

Signal word Warning

Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

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Precautionary statements	P261 Avoid breathing vapours. P264 Wash contaminated skin thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention.
Supplemental label information	EUH212 Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.
Contains	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane

2.3. Other hazards

This product contains terphenyl, hydrogenated which is considered to be a vPvB substance.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Barium sulfate **10 - 30%**

CAS number: 7727-43-7 EC number: 231-784-4

Classification
Not Classified

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane **10 - <20%**

CAS number: 1675-54-3 EC number: 216-823-5 REACH registration number: 01-2119456619-26-XXXX

Classification
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Skin Sens. 1 - H317
Aquatic Chronic 2 - H411

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane **5 - 10%**

CAS number: 9003-36-5 EC number: 701-263-0 REACH registration number: 01-2119454392-40-XXXX

Classification
Skin Irrit. 2 - H315
Skin Sens. 1 - H317
Aquatic Chronic 2 - H411

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Terphenyl, hydrogenated		**5 - 10%**
CAS number: 61788-32-7	EC number: 262-967-7	REACH registration number: 01-2119488183-33-XXXX
Classification Aquatic Chronic 2 - H411		

Quartz		**< 0.3%**
CAS number: 14808-60-7	EC number: 238-878-4	
Classification STOT RE 1 - H372		

The full text for all hazard statements is displayed in Section 16.

Composition comments This product contains terphenyl, hydrogenated which is considered to be a vPvB substance. This product contains > 1% of titanium dioxide but less than 1% of all particles have a diameter ≤ 10 µm therefore the classification Carc. 2; H351 does not apply.

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 affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

Ingestion Rinse mouth thoroughly with water. Give plenty of water to drink. 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 skin thoroughly with soap and water. Get medical attention if any discomfort continues.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue.

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

Inhalation No specific symptoms known.

Ingestion May cause discomfort if swallowed. May cause irritation to mouth, throat and stomach.

Skin contact Skin irritation. Allergic rash.

Eye contact Causes serious eye irritation. Symptoms following overexposure may include the following: Redness. Pain.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire.

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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

Specific hazards Toxic gases or vapours.

Hazardous combustion products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Wear self contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Provide adequate ventilation. Avoid inhalation of vapours. Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Take off contaminated clothing and wash it before reuse.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up When handling waste, the safety precautions applying to handling of the product should be considered. Wear necessary protective equipment. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

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

Usage precautions Avoid contact with skin and eyes. Avoid inhalation of vapours. Persons susceptible to allergic reactions should not handle this product. Good personal hygiene procedures should be implemented. Avoid release to the environment. Wear protective clothing as described in Section 8 of this safety data sheet.

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

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

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Occupational exposure limits

Barium sulfate

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust
Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Terphenyl, hydrogenated

Long-term exposure limit (8-hour TWA): WEL 2 ppm 19 mg/m³
Short-term exposure limit (15-minute): WEL 5 ppm 48 mg/m³

Titanium dioxide

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust
Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

Quartz

Long-term exposure limit (8-hour TWA): WEL 0.1 mg/m³ respirable fraction
Carc

WEL = Workplace Exposure Limit.
Carc = Capable of causing cancer and/or heritable genetic damage.

Barium sulfate (CAS: 7727-43-7)

DNEL	Workers - Inhalation; Long term systemic effects: 10 mg/m³ Workers - Inhalation; Long term local effects: 10 mg/m³
PNEC	Fresh water; 115 µg/l STP; 62.2 mg/l Sediment (Freshwater); 600.4 mg/kg Soil; 207.7 mg/kg

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (CAS: 1675-54-3)

DNEL	Workers - Inhalation; Long term systemic effects: 4.93 mg/m³ Workers - Dermal; Long term systemic effects: 0.75 mg/kg/day
PNEC	Fresh water; 0.006 mg/l Fresh water, Intermittent release; 0.018 mg/l marine water; 0.001 mg/l marine water, Intermittent release; 0.002 mg/l STP; 10 mg/l Sediment (Freshwater); 0.341 mg/kg Sediment (Marinewater); 0.034 mg/kg Soil; 0.065 mg/kg Oral (food); 11 mg/kg food

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane (CAS: 9003-36-5)

DNEL	Workers - Inhalation; Long term systemic effects: 29.39 mg/m³ Workers - Dermal; Long term systemic effects: 104.15 mg/kg/day Workers - Dermal; Short term local effects: 8.3 µg/cm²

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PNEC	Fresh water; 0.003 mg/l Intermittent release; 0.025 mg/l marine water; 0.0003 mg/l STP; 10 mg/l Sediment (Freshwater); 0.294 mg/kg Sediment (Marinewater); 0.029 mg/kg Soil; 0.237 mg/kg

Terphenyl, hydrogenated (CAS: 61788-32-7)

DNEL	Workers - Inhalation; Long term systemic effects: 2.01 mg/m³ Workers - Dermal; Long term systemic effects: 0.622 mg/kg/day
PNEC	- Fresh water; 2 µg/l - marine water; 0.2 µg/l - Intermittent release, Fresh water; 13.4 µg/l - STP; 10.3 mg/l - Sediment (Freshwater); 63.2 mg/kg - Sediment (Marinewater); 6.32 mg/kg - Soil; 12.6 mg/kg - Oral (food); 2.22 mg/kg

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	Provide adequate ventilation.
Eye/face protection	Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.
Hand protection	Use protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene measures	Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated.
Respiratory protection	Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.
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	Grey. White.
Odour	Slight.

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Odour threshold	No information available.
pH	Technically not feasible.
Melting point	No information available.
Initial boiling point and range	No information available.
Flash point	Not applicable.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	1.34 @ 20°C
Solubility(ies)	Insoluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	12,000 - 18,000 P @ 20°C
Explosive properties	Not considered to be explosive.
Oxidising properties	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

9.2. Other information

Other information	None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability	Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not determined. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid	Strong acids. Strong alkalis. Strong oxidising agents.

10.6. Hazardous decomposition products

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Hazardous decomposition products	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects	There are no data available on this product.

Acute toxicity - oral

Notes (oral LD_{50})	Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD_{50})	Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC_{50})	Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation	Skin Irrit. 2 Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation	Eye Irrit. 2 Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation	Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation	Skin Sens. 1 May cause an allergic skin reaction.

Germ cell mutagenicity

Summary	Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity	Based on available data the classification criteria are not met.

Reproductive toxicity

Summary	Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure	Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard	Not relevant, due to the form of the product.

Inhalation	No specific health hazards known.
Ingestion	May cause discomfort if swallowed.
Skin contact	Irritating to skin. May cause sensitisation by skin contact.
Eye contact	Causes serious eye irritation.
Acute and chronic health hazards	Mild dermatitis, allergic skin rash. Defatting, drying and cracking of skin.
Route of exposure	Dermal Ingestion Inhalation

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Toxicological information on ingredients.

Barium sulfate

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	5,000.0

Acute toxicity - dermal

Notes (dermal LD_{50})	LD_{50} >2000 mg/kg, Dermal, Rat

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	15,000.0
Species	Rat
ATE oral (mg/kg)	15,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	23,000.0
Species	Rat
ATE dermal (mg/kg)	23,000.0

Skin corrosion/irritation

Skin corrosion/irritation	Causes skin irritation.
Animal data	Skin irritant (rabbit, OECD Guideline 404 (Acute Dermal Irritation / Corrosion))

Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye irritation. OECD 405 Acute eye irritation / corrosion: Irritating (rabbit)

Skin sensitisation

Skin sensitisation	May cause an allergic skin reaction. Local Lymph Node Assay (LLNA) - Mouse: Sensitising.

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	5,000.0

Skin corrosion/irritation

Skin corrosion/irritation	Causes skin irritation.

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Animal data	Skin irritant (rabbit, OECD Guideline 404 (Acute Dermal Irritation / Corrosion))
Skin sensitisation	
Skin sensitisation	May cause an allergic skin reaction. Local Lymph Node Assay (LLNA) - Mouse: Sensitising.

Terphenyl, hydrogenated

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	12,500.0
Species	Rat
Notes (oral LD_{50})	LD_{50} > 10000 mg/kg, Oral, Rat
Acute toxicity - dermal	
Notes (dermal LD_{50})	LD_{50} >2,000 mg/kg, Dermal, Rabbit
Acute toxicity - inhalation	
Notes (inhalation LC_{50})	LC50 > 4.7 mg/l/4hr/day, Inhalation, Rat

Titanium dioxide

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	10,000.0
Species	Rat
Notes (oral LD_{50})	LD_{50} >10000 mg/kg, Oral, Rat
ATE oral (mg/kg)	10,000.0
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	10,000.0
Species	Rabbit
Notes (dermal LD_{50})	LD_{50} >10000 mg/kg, Dermal, Rabbit
ATE dermal (mg/kg)	10,000.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} dust/mist mg/l)	6.82
Species	Rat
Notes (inhalation LC_{50})	LC50 >6.82 mg/l, Inhalation, Rat
ATE inhalation (dusts/mists mg/l)	6.82
Carcinogenicity	
Carcinogenicity	Suspected of causing cancer by inhalation.

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Target organ for carcinogenicity	Lungs

SECTION 12: Ecological information

Ecotoxicity There are no data on the ecotoxicity of this product.

12.1. Toxicity

Toxicity There are no data for the product.

Acute aquatic toxicity

Summary Based on available data the classification criteria are not met.

Chronic aquatic toxicity

Summary Aquatic Chronic 2 Toxic to aquatic life with long lasting effects.

Ecological information on ingredients.

Barium sulfate

Acute aquatic toxicity

Acute toxicity - fish	EC_{50}, 96 hours: >3.5 mg/l, Brachydanio rerio (Zebra Fish)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 14.5 mg/l, Daphnia magna

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 2.0 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 1.8 mg/l, Daphnia magna
Acute toxicity - aquatic plants	ErC50, 72 hours: >11 mg/l, Selenastrum capricornutum

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 0.3 mg/l, Daphnia magna

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 2.54 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 2.55 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: >1000 mg/l, Algae

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Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: >1000 mg/l, Fish

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Acute toxicity - aquatic invertebrates	EC_{80}, 48 hours: > 1.34 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{80}, 48 hours: > 320 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	NOEC, 3 hours: 103 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates	NOELR, 21 days: <1 mg/l, Daphnia magna

Titanium dioxide

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: >100 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: >100 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: >10000 mg/l, Diatom

12.2. Persistence and degradability

Persistence and degradability This product is not expected to be readily biodegradable.

Ecological information on ingredients.

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Persistence and degradability	Not readily biodegradable.

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane

Persistence and degradability	Not readily biodegradable.
Biodegradation	- Degradation 16: 28 days

12.3. Bioaccumulative potential

Bioaccumulative potential Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.

Partition coefficient No information available.

Ecological information on ingredients.

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Bioaccumulative potential	Bioaccumulation is unlikely.

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane

Bioaccumulative potential	BCF: 150 L/kg ww, QSAR

Terphenyl, hydrogenated

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Bioaccumulative potential BCF: 700 - 5200,

Partition coefficient log Pow: 6.5

Titanium dioxide

Bioaccumulative potential BCF: 9.6, Cyprinus carpio (Common carp) 42 days

12.4. Mobility in soil

Mobility The product is insoluble in water.

Ecological information on ingredients.

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Adsorption/desorption coefficient - Koc: 445 @ 20°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product contains a substance classified as vPvB.

Ecological information on ingredients.

Terphenyl, hydrogenated

Results of PBT and vPvB assessment This substance is classified as vPvB.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods May be mixed with base component to give an inert polymeric material.

Waste class HP4 Irritant HP13 Sensitising HP14 Ecotoxic Recommended EWC Code 08 04 09*

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 3077

UN No. (IMDG) 3077

UN No. (ICAO) 3077

UN No. (ADN) 3077

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane and terphenyl, hydrogenated)

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane and terphenyl, hydrogenated)

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Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane and terphenyl, hydrogenated)
Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane and terphenyl, hydrogenated)

14.3. Transport hazard class(es)

ADR/RID class	9
ADR/RID classification code	M7
ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9

Transport labels

14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

14.6. Special precautions for user

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	2Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

SECTION 15: Regulatory information

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

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National regulations	The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, UK SI 2019/720. The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020, UK SI 2020/1567. The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended). The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, UK SI 2019/758, UK SI 2019/858 and UK SI 2019/1144. The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020, UK SI 2020/1577. Health and Safety at Work etc. Act 1974 (as amended).
EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Guidance	Workplace Exposure Limits EH40.
Health and environmental listings	Terphenyl, hydrogenated is on the GB and the EU Candidate Lists of Substances of Very High Concern (SVHCs) (vPvB (Article 57e))

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE: Acute Toxicity Estimate.
BCF: Bioconcentration Factor.
CAS: Chemical Abstracts Service.
DNEL: Derived No Effect Level.
EC_{50}: 50% of maximal Effective Concentration.
GHS: Globally Harmonized System.
IATA: International Air Transport Association.
IBC: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code).
ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
Kow: Octanol-water partition coefficient.
LC_{50}: Lethal Concentration to 50 % of a test population.
LD_{50}: Lethal Dose to 50% of a test population (Median Lethal Dose).
LOAEC: Lowest Observed Adverse Effect Concentration.
LOAEL: Lowest Observed Adverse Effect Level.
LOEC: Lowest Observed Effect Concentration.
MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
NOAEC: No Observed Adverse Effect Concentration.
NOAEL: No Observed Adverse Effect Level.
PBT: Persistent, Bioaccumulative and Toxic substance.
PNEC: Predicted No Effect Concentration.
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
SVHC: Substances of Very High Concern.
vPvB: Very Persistent and Very Bioaccumulative.

Key literature references and sources for data

SDS from supplier. Source: European Chemicals Agency, http://echa.europa.eu/

Classification procedures according to Regulation (EC) 1272/2008

Aquatic Chronic 2 - H411, Skin Irrit. 2 - H315, Skin Sens. 1 - H317, Eye Irrit. 2 - H319:

Revision comments

Revised sections: 1, 2, 3, 4, 6, 7, 8. 9, 11, 12, 14, 15, 16.

Revision date

25/02/2022

Revision

2

Supersedes date

10/05/2017

SDS number

10287

SDS status

Approved.

Hazard statements in full

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H372 Causes damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

Arbokol 1025 SP Curing Agent

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 any 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.