



## SAFETY DATA SHEET ARBOSIL HM

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** ARBOSIL HM

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

**Identified uses** General purpose silicone sealant Glass and sanitary sealant

**Uses advised against** Use only for intended applications.

#### 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** Not Classified

**Environmental hazards** Not Classified

#### 2.2. Label elements

**Hazard statements** NC Not Classified

**Supplemental label information** EUH208 Contains 4,5-dichloro-2-n-octyl-4-isothiazolin-3-one. May produce an allergic reaction.  
EUH210 Safety data sheet available on request.

#### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. Moisture curing process releases a small amount of acetic acid which can irritate skin and mucous membranes.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures



# ARBOSIL HM

**Notes for the doctor** Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable 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

**Specific hazards** No unusual fire or explosion hazards noted.

**Hazardous combustion products** Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Acetic acid.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Avoid breathing fire gases or vapours.

**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 and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Do not touch or walk into spilled material.

### 6.2. Environmental precautions

**Environmental precautions** Do not allow into watercourses. Contain spillage with sand, earth or other suitable non-combustible material.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Collect and place in suitable waste disposal containers and seal securely. Clean any slippery coating that remains using a detergent / soap solution or other biodegradable cleaner.

**Precautionary measures to prevent the occurrence of secondary hazards** Eliminate all sources of ignition.

### 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. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Good personal hygiene procedures should be implemented. For personal protection, see Section 8. Product may release acetic acid. No smoking, sparks, flames or other sources of ignition near spillage. Take precautionary measures against static discharge.

### 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)

## ARBOSIL HM

**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

##### Occupational exposure limits

##### Acetic acid

Long-term exposure limit (8-hour TWA): WEL 10 ppm 25 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 20 ppm 50 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit.

##### Triacetoxyethylsilane (CAS: 17689-77-9)

<b>DNEL</b>	Workers - Inhalation; Long term local effects: 32.5 mg/m <sup>3</sup> Workers - Inhalation; Short term local effects: 32.5 mg/m <sup>3</sup>
<b>PNEC</b>	Fresh water; 0.2 mg/l Fresh water, Intermittent release; 1.7 mg/l marine water; 0.02 mg/l STP; 1 mg/l Sediment (Freshwater); 0.74 mg/kg Sediment (Marinewater); 0.074 mg/kg Soil; 0.031 mg/kg

##### Acetic acid (CAS: 64-19-7)

<b>DNEL</b>	Workers - Inhalation; Long term local effects: 25 mg/m <sup>3</sup> Workers - Inhalation; Short term local effects: 25 mg/m <sup>3</sup>
<b>PNEC</b>	Fresh water; 3.058 mg/l marine water; 0.306 mg/l Intermittent release; 30.58 mg/l STP; 85 mg/l Sediment (Freshwater); 11.36 mg/kg Sediment (Marinewater); 1.136 mg/kg Soil; 0.47 mg/kg

#### 8.2. Exposure controls

##### Protective equipment



**Appropriate engineering controls**

Provide adequate ventilation.

**Eye/face protection**

Wear chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

**Hand protection**

Wear protective gloves. Recommended glove types: Protective gloves made of butyl rubber  
Thickness of the material: > 0.3 mm  
Breakthrough time: > 480 min  
Recommended glove types: Protective gloves made of nitrile rubber  
Thickness of the material: > 0.1 mm  
Breakthrough time: 60 - 120 min

## ARBOSIL HM

<b>Other skin and body protection</b>	Wear appropriate clothing to prevent repeated or prolonged skin contact.
<b>Hygiene measures</b>	No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products. Wash at the end of each work shift and before eating, smoking and using the toilet.
<b>Respiratory protection</b>	Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Gas filter type ABEK Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136.
<b>Environmental exposure controls</b>	Avoid discharge into drains.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Uncured -paste. Cured - rubber.
<b>Colour</b>	Various colours.
<b>Odour</b>	Pungent.
<b>Odour threshold</b>	Acetic acid: 0.025 mg/m <sup>3</sup>
<b>pH</b>	Product displays acidic reaction with water.
<b>Melting point</b>	Not applicable.
<b>Initial boiling point and range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Evaporation factor</b>	No data available.
<b>Upper/lower flammability or explosive limits</b>	Lower flammable/explosive limit: 4 (acetic acid) Upper flammable/explosive limit: 17 (acetic acid)
<b>Vapour pressure</b>	Not applicable.
<b>Vapour density</b>	No data available.
<b>Relative density</b>	1.04
<b>Solubility(ies)</b>	Practically insoluble Hydrolytic decomposition occurs.
<b>Partition coefficient</b>	: Not applicable.
<b>Auto-ignition temperature</b>	~ 400°C
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	800000 mPa s @ °C
<b>Explosive properties</b>	Not applicable.
<b>Explosive under the influence of a flame</b>	No
<b>Oxidising properties</b>	Does not meet the criteria for oxidising.
<b>9.2. Other information</b>	
<b>Other information</b>	None.

## ARBOSIL HM

### 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. Moisture curing process releases: a small amount of acetic acid

#### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Not known. Will not polymerise.

#### 10.4. Conditions to avoid

**Conditions to avoid** Avoid contact with the following materials: Water, moisture.

#### 10.5. Incompatible materials

**Materials to avoid** Reacts with water, basic substances and alcohols. Reaction causes the formation of acetic acid.

#### 10.6. Hazardous decomposition products

**Hazardous decomposition products** By hydrolysis: Acetic acid. Temperatures of ~ 150 C may generate: A small amount of formaldehyde, through oxidation.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

**Toxicological effects** By analogy to a tested similar product.

#### Acute toxicity - oral

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

**Notes (oral LD<sub>50</sub>)** LD<sub>50</sub> >2000 mg/kg, Oral, Rat Conclusion by analogy.

**ATE oral (mg/kg)** 73,000.0

#### Acute toxicity - dermal

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

**Notes (dermal LD<sub>50</sub>)** LD50, dermal, rabbit >2009mg/Kg Conclusion by analogy.

#### Acute toxicity - inhalation

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

**Notes (inhalation LC<sub>50</sub>)** Acetic acid: LC 50 (Rat, 4 h) - 11.4 mg/l

#### Skin corrosion/irritation

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

**Animal data** Not irritating (rabbit). Conclusion by analogy.

#### Serious eye damage/irritation

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

**Serious eye damage/irritation** in vitro assay; Bovine cornea: No eye irritation. Conclusion by analogy OECD 437. Not irritating (rabbit). Conclusion by analogy.

#### Respiratory sensitisation

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

## ARBOSIL HM

### Skin sensitisation

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

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

### Germ cell mutagenicity

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

### Carcinogenicity

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

### Reproductive toxicity

**Reproductive toxicity - fertility** 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.

**General information** Prolonged contact may cause redness, irritation and dry skin.

**Inhalation** No specific health hazards known.

**Ingestion** No harmful effects expected from quantities likely to be ingested by accident.

**Skin contact** May cause an allergic skin reaction.

**Eye contact** May cause temporary eye irritation.

**Acute and chronic health hazards** Moisture curing process releases a small amount of acetic acid which can irritate skin and mucous membranes.

## SECTION 12: Ecological information

**Ecotoxicity** The product is not expected to be hazardous to the environment. In cross-linked state not soluble in water. Easily separable from water by filtration.

### 12.1. Toxicity

**Toxicity** Based on available data no effects on aquatic organisms relevant for classification are expected up to the product's limits of water solubility.

### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: > 10 - < 100 mg/l, *Oncorhynchus mykiss* (Rainbow trout)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: > 10 - < 100 mg/l, *Daphnia magna*

**Acute toxicity - aquatic plants** ErC<sub>50</sub>, 24 hours: > 10 - < 100 mg/l, *Navicula pelliculosa*  
NOEC, 24 hours: > 1 mg/l, *Navicula pelliculosa*

### Chronic aquatic toxicity

**Chronic toxicity - fish early life stage** NOEC, : > 1 mg/l, *Oncorhynchus mykiss* (Rainbow trout)

## ARBOSIL HM

**Chronic toxicity - aquatic invertebrates**      NOEC, : > 1 mg/l, Daphnia magna

### Ecological information on ingredients.

#### 4,5-dichloro-2-n-octyl-4-isothiazolin-3-one

##### Acute aquatic toxicity

<b>LE(C)<sub>50</sub></b>	0.001 < L(E)C <sub>50</sub> ≤ 0.01
<b>M factor (Acute)</b>	100
<b>Acute toxicity - fish</b>	LC <sub>50</sub> , 96 hours: 0.0027 mg/l, Oncorhynchus mykiss (Rainbow trout)
<b>Acute toxicity - aquatic invertebrates</b>	EC <sub>50</sub> , 48 hours: 0.0052 mg/l, Daphnia magna
<b>Acute toxicity - aquatic plants</b>	ErC <sub>50</sub> , 24 hours: 0.0016 mg/l, Navicula pelliculosa NOEC, 24 hours: 0.00034 mg/l, Navicula pelliculosa
<b><u>Chronic aquatic toxicity</u></b>	
<b>M factor (Chronic)</b>	100
<b>Chronic toxicity - fish early life stage</b>	NOEC, 97 days: 0.00056 mg/l, Oncorhynchus mykiss (Rainbow trout)
<b>Chronic toxicity - aquatic invertebrates</b>	NOEC, 21 days: 0.00063 mg/l, Daphnia magna

### 12.2. Persistence and degradability

**Persistence and degradability**      Silicone content: biologically not degradable. The product of hydrolysis (acetic acid) is readily biodegradable.

### Ecological information on ingredients.

#### 4,5-dichloro-2-n-octyl-4-isothiazolin-3-one

**Persistence and degradability**      Not applicable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential**      Bioaccumulation in aquatic organisms is not expected.

**Partition coefficient**      : Not applicable.

### 12.4. Mobility in soil

**Mobility**      The product is insoluble in water.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment**      No data available.

### 12.6. Other adverse effects

**Other adverse effects**      None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods



## ARBOSIL HM

<b>General information</b>	When handling waste, the safety precautions applying to handling of the product should be considered.
<b>Disposal methods</b>	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Confirm disposal procedures with environmental engineer and local regulations.
<b>Waste class</b>	Recommended EWC Code 08 04 10

### SECTION 14: Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

#### 14.1. UN number

Not applicable.

#### 14.2. UN proper shipping name

Not applicable.

#### 14.3. Transport hazard class(es)

No transport warning sign required.

#### 14.4. Packing group

Not applicable.

#### 14.5. Environmental hazards

##### **Environmentally hazardous substance/marine pollutant**

No.

#### 14.6. Special precautions for user

Not applicable.

#### 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

##### **National regulations**

Control of Substances Hazardous to Health Regulations 2002 (as amended).  
 Health and Safety at Work etc. Act 1974 (as amended).  
 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 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.  
 The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

## ARBOSIL HM

**EU legislation** 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).  
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).

**Guidance** Workplace Exposure Limits EH40.

**Restrictions (Annex XVII Regulation 1907/2006)** No relevant restrictions.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

**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<sub>50</sub>: 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<sub>50</sub>: Lethal Concentration to 50 % of a test population.  
LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).  
LOAEC: Lowest Observed Adverse Effect Concentration.  
LOAEL: Lowest Observed Adverse Effect Level.  
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.  
NOEC: No Observed Effect Concentration.  
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.

**Classification abbreviations and acronyms**

Acute Tox. = Acute toxicity  
Asp. Tox. = Aspiration hazard  
Eye Dam. = Serious eye damage  
Skin Corr. = Skin corrosion

## ARBOSIL HM

<b>Key literature references and sources for data</b>	SDS from supplier. Source: European Chemicals Agency, <a href="http://echa.europa.eu/">http://echa.europa.eu/</a>
<b>Revision comments</b>	Revised sections: 1, 2, 3, 4, 6, 7, 8, 9, 11, 12, 15, 16.
<b>Revision date</b>	03/05/2022
<b>Revision</b>	2
<b>Supersedes date</b>	09/05/2017
<b>SDS number</b>	20332
<b>SDS status</b>	Approved.
<b>Hazard statements in full</b>	H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage.

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.