SAFETY DATA SHEET

ARBOSIL® 1081

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

1.1 Product identifier

Product name : ARBOSIL® 1081

Product description : Glass and sanitary sealant.

Other means of identification : Not available.

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

Identified uses
Glass and sanitary sealant.

Uses advised against	Reason
For professional users only.	-

1.3 Details of the supplier of the safety data sheet

CARLISLE®Adshead Ratcliffe & Co. Ltd
Unit 1, Park Lane Business Park, Park Lane , Kirkby-in-Ashfield, Nottingham, NG17 9GU, United Kingdom
T +44 (0)1623 627285

e-mail address of person responsible for this SDS : SDSQueries@carlisleccm.com

1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number : National Poisons Information Service (NPIS)
Tel: 0344 892 0111 (for healthcare professionals only)
Website: http://www.npis.org/
Members of Public in England, Scotland and Wales can contact NHS 111/NHS 24 by dialling 111. In Northern Ireland contact your local GP.

Supplier

Telephone number : +44 (0)1773 826661
(Office hours: 8.30 - 17.00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Not classified.

The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

SECTION 2: Hazards identification

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label elements : Contains 4,5-dichloro-2-octyl- 2H-isothiazol-3-one. May produce an allergic reaction. Safety data sheet available on request.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : Product may release acetic acid on curing. Acetic acid may irritate skin and mucous membranes.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
triacetoxyethylsilane	REACH #: 01-2119881778-15 EC: 241-677-4 CAS: 17689-77-9	<3	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 EUH014	[1]
methylsilanetriyl triacetate	REACH #: 01-2119962266-32 EC: 224-221-9 CAS: 4253-34-3	<3	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 EUH014	[1]
Oligomeric ethyl and methyl acetoxysilanes	-	<2	Skin Corr. 1B, H314 Eye Dam. 1, H318	[1]
acetic acid	REACH #: 01-2119475328-30 EC: 200-580-7 CAS: 64-19-7 Index: 607-002-00-6	≤0.1	Flam. Liq. 3, H226 Skin Corr. 1A, H314 Eye Dam. 1, H318	[1] [2]
4,5-dichloro-2-octyl- 2H-isothiazol-3-one	EC: 264-843-8 CAS: 64359-81-5 Index: 613-335-00-8	<0.05	Acute Tox. 4, H302 Acute Tox. 2, H330 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) EUH071 **See Section 16 for the full text of the H statements declared above.**	[1]

Type

SECTION 3: Composition/information on ingredients

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : The product releases a small quantity of acetic acid which irritates mucous membranes.

Inhalation : No specific data.

Skin contact : May cause skin sensitization.
The product releases a small quantity of acetic acid which irritates skin and mucous membranes.

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : In case of fire, use water spray (fog), foam, dry chemical or CO_2.

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

5.3 Advice for firefighters

SECTION 5: Firefighting measures

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to British standard BS EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Eliminate all ignition sources. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Eliminate all ignition sources. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

6.4 Reference to other sections

: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).
Product may release acetic acid. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Keep away from sources of ignition. Take precautionary measures against electrostatic discharges. Cool containing vessels with flooding quantities of water until well after fire is out.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

SECTION 7: Handling and storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
acetic acid	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** STEL 15 minutes: 50 mg/m³. STEL 15 minutes: 20 ppm. TWA 8 hours: 25 mg/m³. TWA 8 hours: 10 ppm.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: British Standard BS EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) British Standard BS EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) British Standard BS EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Result
triacetoxyethylsilane	**DNEL - General population - Long term - Oral** 5.7 mg/kg bw/day Effects: Systemic **DNEL - General population - Long term - Dermal** 5.7 mg/kg bw/day Effects: Systemic **DNEL - General population - Long term - Inhalation** 6.5 mg/m³ Effects: Local **DNEL - Workers - Long term - Dermal** 11.39 mg/kg bw/day Effects: Systemic **DNEL - General population - Long term - Inhalation** 19.81 mg/m³ Effects: Systemic **DNEL - Workers - Short term - Inhalation** 32.5 mg/m³ Effects: Local **DNEL - Workers - Long term - Inhalation**

SECTION 8: Exposure controls/personal protection

32.5 mg/m³
Effects: Local

DNEL - Workers - Long term - Inhalation
80.33 mg/m³
Effects: Systemic

methylsilanetriyl triacetate

DNEL - General population - Long term - Inhalation
31 mg/m³
Effects: Local

DNEL - Workers - Long term - Inhalation
31 mg/m³
Effects: Local

DNEL - General population - Short term - Inhalation
61 mg/m³
Effects: Local

DNEL - Workers - Short term - Inhalation
61 mg/m³
Effects: Local

acetic acid

DNEL - General population - Short term - Inhalation
25 mg/m³
Effects: Local

DNEL - General population - Long term - Inhalation
25 mg/m³
Effects: Local

DNEL - Workers - Short term - Inhalation
25 mg/m³
Effects: Local

DNEL - Workers - Long term - Inhalation
25 mg/m³
Effects: Local

PNECs

Product/ingredient name	Result
triacetoxyethylsilane	**Fresh water** 0.2 mg/l **Fresh water** 1.7 mg/l **Marine water** 0.02 mg/l **Sewage Treatment Plant** 1 mg/l **Fresh water sediment** 0.74 mg/kg dwt **Marine water sediment** 0.074 mg/kg dwt **Soil** 0.031 mg/kg dwt
methylsilanetriyl triacetate	**Sewage Treatment Plant**

SECTION 8: Exposure controls/personal protection

6.9 mg/l

Fresh water sediment
4.8 mg/kg dwt

Marine water sediment
0.48 mg/kg dwt

Soil
0.19 mg/kg dwt

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.Recommended glove types:
Protective gloves made of butyl rubber
thickness of the material: > 0.3 mm
Breakthrough time: > 480 min
Protective gloves made of nitrile rubber
thickness of the material: > 0.1 mm
Breakthrough time: 60 - 120 min

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use appropriate respiratory protection if there is a risk of exceeding any exposure limits. Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
Filter type: ABEK

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. [paste]

Color : Various

Odor : Acetic acid.

Odor threshold : Not available.

Melting point/freezing point : Not available.

Initial boiling point and boiling range : Not available.

Flammability (solid, gas) : Not available.

Upper/lower flammability or explosive limits : Explosion limits for released acetic acid: 4 - 17%(V).

Flash point : Closed cup: 100°C (212°F) [ISO 3679]

Auto-ignition temperature : >400°C (>752°F) [DIN 51794]

Decomposition temperature : >300°C

pH : Not applicable.

Viscosity : Dynamic (room temperature): >1000000 mPa·s
Kinematic (room temperature): Not available.
Kinematic (40°C): Not available.

Solubility in water : Insoluble

Partition coefficient: n-octanol/water : Not applicable.

Vapor pressure :

	Vapor Pressure at 20°C			Vapor pressure at 50°C		
Ingredient name	**mm Hg**	**kPa**	**Method**	**mm Hg**	**kPa**	**Method**
acetic acid	15.59383	2.1				
methylsilanetriyl triacetate	0.2	0.027				

Evaporation rate : Not available.

Relative density : Not available.

Density : 1.02 g/cm³ [23°C (73.4°F)] [ISO 1183]

Vapor density : Not available.

Explosive properties : Not available.

Oxidizing properties : Not available.

Particle characteristics

Median particle size : Not applicable.

9.2 Other information

Not available.

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

SECTION 10: Stability and reactivity

10.4 Conditions to avoid : moisture
heat, hot surfaces, sparks, open flames and other ignition sources

10.5 Incompatible materials : Reactive with
water
alkalis
alcohols
The reaction takes place with the formation of acetic acid.

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Acetic acid is released by hydrolysis. Measurements have shown the formation of small amounts of formaldehyde at temperatures above 150 °C through oxidation.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result
ARBOSIL® 1081	**Rat - Oral - LD50** >2000 mg/kg **Rabbit - Dermal - LD50** >2009 mg/kg
triacetoxyethylsilane	**Rat - Oral - LD50** 1460 mg/kg
methylsilanetriyl triacetate	**Rat - Oral - LD50** 1600 mg/kg
acetic acid	**Rat - Oral - LD50** 3310 mg/kg **Rabbit - Dermal - LD50** 1060 mg/kg **Rat - Inhalation - LC50 Vapor** 11000 mg/m³ [4 hours]

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
triacetoxyethylsilane	1460	N/A	N/A	N/A	N/A
methylsilanetriyl triacetate	1600	N/A	N/A	N/A	N/A
acetic acid	3310	N/A	N/A	N/A	N/A
4,5-dichloro-2-octyl- 2H-isothiazol-3-one	567	N/A	N/A	N/A	0.16

Skin corrosion/irritation

Product/ingredient name	Result

SECTION 11: Toxicological information

ARBOSIL® 1081	**Rabbit - Skin - Not irritant**
acetic acid	**Human - Skin - Mild irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 50 mg **Rabbit - Skin - Mild irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 50 mg **Rabbit - Skin - Severe irritant** Amount/concentration applied: 525 mg

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Product/ingredient name	Result
ARBOSIL® 1081	**Rabbit - Eyes - Not irritant**
acetic acid	**Rabbit - Eyes - Mild irritant** Duration of treatment/exposure: 0.5 minutes Amount/concentration applied: 5 mg

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Product/ingredient name	Result
ARBOSIL® 1081	**Guinea pig - skin** Not sensitizing

Skin

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Respiratory

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Reproductive toxicity

SECTION 11: Toxicological information

Not available.

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : The product releases a small quantity of acetic acid which irritates mucous membranes.

Inhalation : No specific data.

Skin contact : May cause skin sensitization.
The product releases a small quantity of acetic acid which irritates skin and mucous membranes.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : May cause allergic reactions in certain individuals.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary [Product] : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result
ARBOSIL® 1081	**Acute - LC50 - Fresh water** Fish - *Oncorhynchus mykiss* 10 to 100 mg/l [96 hours] **Acute - EC50 - Marine water** Crustaceans - *Eastern oyster (Crassostrea virginica)* 1 to 10 mg/l [48 hours] **Acute - NOEC - Fresh water** Aquatic plants - *Navicula pelliculosa* >1 mg/l [24 hours] **Chronic - NOEC - Fresh water** OECD 210 [Fish, Early-Life Stage Toxicity Test] Fish - *Oncorhynchus mykiss (rainbow trout)* >1 mg/l [14 days] **Chronic - NOEC - Fresh water** Daphnia - *Daphnia magna* >1 mg/l [21 days]
triacetoxyethylsilane	**Acute - LC50 - Fresh water** Fish - *Danio rerio* 251 mg/l [96 hours] **Acute - EC50 - Fresh water** Daphnia - *Daphnia magna* 169 mg/l [48 hours]
methylsilanetriyl triacetate	**Acute - LC50 - Fresh water** Fish - *Danio rerio* >500 mg/l [96 hours] **Acute - EC50 - Fresh water** Daphnia - *Daphnia magna* >500 mg/l [48 hours] **Acute - EC50 - Fresh water** Algae - *Raphidocelis subcapitata* >500 mg/l [72 hours]
acetic acid	**Acute - LC50 - Marine water** Crustaceans - Brine shrimp - *Artemia salina* 32 mg/l [48 hours] Effect: Mortality **Acute - LC50 - Fresh water** Fish - Bluegill - *Lepomis macrochirus* 75 ppm [96 hours] Effect: Mortality
4,5-dichloro-2-octyl- 2H-isothiazol-3-one	**Acute - EC50 - Fresh water** Daphnia - Water flea - *Daphnia magna* 0.001 mg/l [48 hours] Effect: Intoxication **Acute - LC50 - Fresh water** US EPA Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss* Weight: 1.2 g 2.7 ppb [96 hours]

SECTION 12: Ecological information

Effect: Mortality

Chronic - NOEC
US EPA
Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss*
0.56 ppb [97 days]
Effect: Growth

Chronic - NOEC - Marine water
OECD
Algae - Diatom - *Nitzschia pungens*
19.789 µg/l [96 hours]
Effect: Population

Acute - EC50 - Fresh water
Algae - Green algae - *Raphidocelis subcapitata*
0.003 mg/l [72 hours]
Effect: Population

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

12.2 Persistence and degradability

Not available.

Conclusion/Summary [Product] : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
triacetoxyethylsilane	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
acetic acid	-0.17	3.16	Low

12.4 Mobility in soil

Soil/Water partition coefficient : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
triacetoxyethylsilane	No	N/A	N/A	No	N/A	N/A	N/A
methylsilanetriyl triacetate	No	N/A	N/A	No	N/A	N/A	N/A
Oligomeric ethyl and methyl acetoxysilanes	No	N/A	N/A	No	N/A	N/A	N/A
acetic acid	No	N/A	No	No	No	N/A	No
4,5-dichloro-2-octyl- 2H-isothiazol-3-one	N/A	N/A	N/A	Yes	N/A	N/A	N/A

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

Packaging

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

UK (GB)/REACH

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

SECTION 15: Regulatory information

None of the components are listed.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

No listed substance

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

Biocidal products regulation : This product is a treated article that contains a biocide in order to protect the product. Active ingredient: 4,5-dichloro-2-octyl-2H-isothiazol-3-one (DCOIT).

EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : Not determined.

Canada : Not determined.

Chile : Not determined.

China : Not determined.

Colombia : Not determined.

Eurasian Economic Union : **Russian Federation inventory**: Not determined.

Japan : **Japan inventory (CSCL)**: Not determined.
Japan inventory (ISHL): Not determined.

New Zealand : Not determined.

Philippines : Not determined.

Republic of Korea : Not determined.

SECTION 15: Regulatory information

Taiwan : Not determined.

Thailand : Not determined.

Turkey : Not determined.

United States : Not determined.

Viet Nam : Not determined.

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = GB CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Not classified.

Full text of abbreviated H statements

H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH014	Reacts violently with water.
EUH071	Corrosive to the respiratory tract.

Full text of classifications

Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	AQUATIC HAZARD (ACUTE) - Category 1
Aquatic Chronic 1	AQUATIC HAZARD (LONG-TERM) - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Skin Corr. 1	SKIN CORROSION/IRRITATION - Category 1
Skin Corr. 1A	SKIN CORROSION/IRRITATION - Category 1A
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
Skin Sens. 1A	SKIN SENSITIZATION - Category 1A

Date of printing : 12 August 2026

Date of issue/ Date of revision : 12 August 2026

Date of previous issue : 20 December 2023

Version : 2

Notice to reader

SECTION 16: Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.