

SAFETY DATA SHEET

ARBO

ARBOSIL® LMS Anthracite

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

1.1 Product identifier

Product name : ARBOSIL® LMS Anthracite
Product description : Sealants
Other means of identification : Not available.

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

| Identified uses | |
|------------------------------|--------|
| Sealants | |
| Uses advised against | Reason |
| For professional users only. | - |

1.3 Details of the supplier of the safety data sheet

Adshead Ratcliffe & Co. Ltd.
 Derby Road, Belper
 Derbyshire.
 DE56 1WJ
 +44 (0)1773 826661

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

1.4 Emergency telephone number

National advisory body/Poison Centre

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.

ARBOSIL® LMS Anthracite

SECTION 2: Hazards identification

- Storage** : Not applicable.
- Disposal** : Not applicable.
- Supplemental label elements** : Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine. 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** : Curing process releases 2-pentanone oxime. 2-Pentanone oxime is classified as harmful if swallowed, causes serious eye irritation, may cause damage to blood/spleen through prolonged/repeated exposure and is harmful to aquatic life with long lasting effects.
Curing process may release a small amount of methanol which is irritating to mucous membranes and has skin drying and narcotic effects.

SECTION 3: Composition/information on ingredients**3.2 Mixtures** : Mixture

| Product/ingredient name | Identifiers | % | Classification | Type |
|---|---|-----------|---|---------|
| ☑ Limestone | EC: 215-279-6 CAS: 1317-65-3 | ≥25 - ≤50 | Not classified. | [2] |
| silicon dioxide | REACH #: 01-2119379499-16 EC: 231-545-4 CAS: 7631-86-9 | ≤10 | Not classified. | [2] |
| 2-Pentanone, 2,2',2''-[O,O',O''-(methylsilylydyne)trioxime] | REACH #: 01-2120004323-76 EC: 484-460-1 | ≤5 | Acute Tox. 4, H302 Eye Irrit. 2, H319 | [1] |
| dioctyltin dilaurate | UK (GB) REACH #: UK- 01-4760535389-6 EC: 222-883-3 CAS: 3648-18-8 Index: 050-031-00-9 | <0.1 | Repr. 1B, H360D STOT RE 1, H372 (immune system) | [1] [2] |
| toluene | EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3 | ≤0.1 | Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 (central nervous system (CNS)) (inhalation) Asp. Tox. 1, H304 Aquatic Chronic 3, H412 | [1] [2] |
| methanol | EC: 200-659-6 | <0.1 | Flam. Liq. 2, H225 | [1] [2] |

ARBOSIL® LMS Anthracite

SECTION 3: Composition/information on ingredients

| | | | |
|--|-------------------------------------|--|--|
| | CAS: 67-56-1 Index: 603-001-00-X | | Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370 See Section 16 for the full text of the H statements declared above. |
|--|-------------------------------------|--|--|

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.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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 delayedOver-exposure signs/symptoms

- Eye contact** : Slightly irritating to the eyes.
- Inhalation** : No specific data.
- Skin contact** : May cause skin sensitisation.
- 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.
Curing process releases 2-pentanone oxime. 2-Pentanone oxime is classified as harmful if swallowed, causes serious eye irritation and may cause damage to blood/spleen through prolonged/repeated exposure.
Curing process may release a small amount of methanol which is irritating to mucous membranes and has skin drying and narcotic effects.

- Specific treatments** : Antidote for methanol poisoning is ethanol.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

SECTION 5: Firefighting measures

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : No specific fire or explosion hazard.

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

5.3 Advice for firefighters

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.

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 spilt material. Put on appropriate personal protective equipment.

For emergency responders : If specialised 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 spilt 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 material for containment and cleaning up

Small spill : Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

Large spill : Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. 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).

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

ARBOSIL® LMS Anthracite

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 unlabelled 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 |
|-------------------------|--|
| limestone | EH40/2005 WELs (United Kingdom (UK), 1/2020). [calcium carbonate inhalable dust/respirable dust] TWA: 4 mg/m ³ 8 hours. Form: respirable dust TWA: 10 mg/m ³ 8 hours. Form: inhalable dust EH40/2005 WELs (United Kingdom (UK), 1/2020). [limestone total inhalable/respirable] TWA: 4 mg/m ³ 8 hours. Form: respirable TWA: 10 mg/m ³ 8 hours. Form: total inhalable |
| silicon dioxide | EH40/2005 WELs (United Kingdom (UK), 1/2020). [silica, amorphous inhalable dust/respirable dust] TWA: 2.4 mg/m ³ 8 hours. Form: respirable dust TWA: 6 mg/m ³ 8 hours. Form: inhalable dust |
| dioctyltin dilaurate | EH40/2005 WELs (United Kingdom (UK), 1/2020). [tin compounds, organic, except cyhexatin (ISO) as Sn] Absorbed through skin. STEL: 0.2 mg/m ³ , (as Sn) 15 minutes. TWA: 0.1 mg/m ³ , (as Sn) 8 hours. |
| toluene | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 384 mg/m ³ 15 minutes. TWA: 191 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes. |
| methanol | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 333 mg/m ³ 15 minutes. STEL: 250 ppm 15 minutes. TWA: 266 mg/m ³ 8 hours. TWA: 200 ppm 8 hours. |

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

SECTION 8: Exposure controls/personal protection

| Product/ingredient name | Type | Exposure | Value | Population | Effects | |
|---|----------|-----------------------|--------------------------|--------------------|--------------------|----------|
| 2-Pentanone, 2,2',2''-[O,O',O''-(methylsilylydyne)trioxime] | DNEL | Long term Inhalation | 0.229 mg/m ³ | Workers | Systemic | |
| | DNEL | Long term Dermal | 0.065 mg/kg bw/day | Workers | Systemic | |
| dioctyltin dilaurate | DNEL | Long term Oral | 0.0005 mg/kg bw/day | General population | Systemic | |
| | DNEL | Long term Inhalation | 0.0009 mg/m ³ | General population | Systemic | |
| toluene | DNEL | Long term Inhalation | 0.0035 mg/m ³ | Workers | Systemic | |
| | DNEL | Long term Oral | 8.13 mg/kg bw/day | General population | Systemic | |
| | DNEL | Long term Inhalation | 56.5 mg/m ³ | General population | Local | |
| | DNEL | Long term Inhalation | 56.5 mg/m ³ | General population | Systemic | |
| | DNEL | Long term Inhalation | 192 mg/m ³ | Workers | Local | |
| | DNEL | Long term Inhalation | 192 mg/m ³ | Workers | Systemic | |
| | DNEL | Long term Dermal | 226 mg/kg bw/day | General population | Systemic | |
| | DNEL | Short term Inhalation | 226 mg/m ³ | General population | Local | |
| | DNEL | Short term Inhalation | 226 mg/m ³ | General population | Systemic | |
| | DNEL | Long term Dermal | 384 mg/kg bw/day | Workers | Systemic | |
| | DNEL | Short term Inhalation | 384 mg/m ³ | Workers | Local | |
| | DNEL | Short term Inhalation | 384 mg/m ³ | Workers | Systemic | |
| | methanol | DNEL | Short term Oral | 4 mg/kg bw/day | General population | Systemic |
| | | DNEL | Long term Oral | 4 mg/kg bw/day | General population | Systemic |
| DNEL | | Short term Dermal | 4 mg/kg bw/day | General population | Systemic | |
| DNEL | | Long term Dermal | 4 mg/kg bw/day | General population | Systemic | |
| DNEL | | Short term Dermal | 20 mg/kg bw/day | Workers | Systemic | |
| DNEL | | Long term Dermal | 20 mg/kg bw/day | Workers | Systemic | |
| DNEL | | Short term Inhalation | 26 mg/m ³ | General population | Local | |
| DNEL | | Long term Inhalation | 26 mg/m ³ | General population | Local | |
| DNEL | | Short term Inhalation | 26 mg/m ³ | General population | Systemic | |
| DNEL | | Long term Inhalation | 26 mg/m ³ | General population | Systemic | |
| DNEL | | Short term Inhalation | 130 mg/m ³ | Workers | Local | |
| DNEL | | Long term Inhalation | 130 mg/m ³ | Workers | Local | |
| DNEL | | Short term Inhalation | 130 mg/m ³ | Workers | Systemic | |
| DNEL | | Long term Inhalation | 130 mg/m ³ | Workers | Systemic | |

PNECs

SECTION 8: Exposure controls/personal protection

| Product/ingredient name | Compartment Detail | Value | Method Detail |
|--|------------------------|-------------|---------------|
| 2-Pentanone, 2,2',2"-[O,O',O"- (methylsilylidyne)trioxime] toluene | Fresh water | 0.1 mg/l | - |
| | Marine water | 0.01 mg/l | - |
| | Sewage Treatment Plant | 2.15 mg/l | - |
| | Fresh water sediment | 0.569 mg/kg | - |
| | Marine water sediment | 0.057 mg/kg | - |
| | Soil | 0.044 mg/kg | - |
| | Fresh water | 0.68 mg/l | - |
| | Fresh water | 0.68 mg/l | - |
| | Marine water | 0.68 mg/l | - |
| | Sewage Treatment Plant | 13.61 mg/l | - |
| | Fresh water sediment | 16.39 mg/kg | - |
| | Marine water sediment | 16.39 mg/kg | - |
| | Soil | 2.89 mg/kg | - |

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 and safety showers 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.

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.

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 | : Solid. [Paste.] |
| Colour | : Anthracite Grey. |
| Odour | : Not available. |
| Odour 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 | : Not applicable. |
| Flash point | : Not applicable. |
| Auto-ignition temperature | : Not applicable. |
| Decomposition temperature | : Not available. |
| pH | : Not available. |
| Viscosity | : Not applicable. |
| Solubility in water | : Insoluble |
| Miscible with water | : No. |
| Partition coefficient: n-octanol/ water | : Not applicable. |
| Vapour pressure | : Not available. |
| Relative density | : 1.24 to 1.28 |
| Vapour density | : Not applicable. |
| Explosive properties | : Not available. |
| Oxidising properties | : Not available. |
| Particle characteristics | |
| Median particle size | : 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. |
| 10.4 Conditions to avoid | : No specific data. |
| 10.5 Incompatible materials | : No specific data. |
| 10.6 Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|------------------------|-----------------------|---------------------|----------|
| 2-Pentanone, 2,2',2''-[O,O',O''-(methylsilyldiylidene)trioxime] | LD50 Dermal | Rat - Male, Female | >1782 mg/kg | - |
| diocetyl tin dilaurate | LD50 Oral | Rat - Female | 1234 mg/kg | - |
| toluene | LD50 Oral | Rat | 6450 mg/kg | - |
| | LC50 Inhalation Vapour | Rat | 49 g/m ³ | 4 hours |
| methanol | LD50 Oral | Rat | 636 mg/kg | - |
| | LC50 Inhalation Gas. | Rat | 145000 ppm | 1 hours |
| | LC50 Inhalation Gas. | Rat | 64000 ppm | 4 hours |
| | LD50 Dermal | Rabbit | 15800 mg/kg | - |
| | LD50 Oral | Rat | 5600 mg/kg | - |

Conclusion/Summary : 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 (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|--------------|----------------|--------------------------|-----------------------------|-------------------------------------|
| ARBOSIL® LMS Anthracite | 37064.8 | N/A | N/A | N/A | N/A |
| 2-Pentanone, 2,2',2''-[O,O',O''-(methylsilyldiylidene)trioxime] | 1234 | N/A | N/A | N/A | N/A |
| diocetyl tin dilaurate | 6450 | N/A | N/A | N/A | N/A |
| toluene | N/A | N/A | N/A | 49 | N/A |
| methanol | 100 | 300 | 64000 | 3 | N/A |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|--------------------------|---------|-------|--------------------|-------------|
| silicon dioxide | Eyes - Mild irritant | Rabbit | - | 24 hours 25 mg | - |
| 2-Pentanone, 2,2',2''-[O,O',O''-(methylsilyldiylidene)trioxime] | Eyes - Irritant | Rabbit | - | - | - |
| toluene | Eyes - Mild irritant | Rabbit | - | 0.5 minutes 100 mg | - |
| | Eyes - Mild irritant | Rabbit | - | 870 ug | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 2 mg | - |
| | Skin - Mild irritant | Pig | - | 24 hours 250 uL | - |
| | Skin - Mild irritant | Rabbit | - | 435 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 mg | - |
| methanol | Skin - Moderate irritant | Rabbit | - | 500 mg | - |
| | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 mg | - |
| | Eyes - Moderate irritant | Rabbit | - | 40 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 mg | - |

Conclusion/Summary

Skin : Based on available data, the classification criteria are not met.

Eyes : Based on available data, the classification criteria are not met.

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

Sensitisation

Conclusion/Summary

Skin : Based on available data, the classification criteria are not met.

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

Mutagenicity

ARBOSIL® LMS Anthracite

SECTION 11: Toxicological information**Conclusion/Summary** : Based on available data, the classification criteria are not met.**Carcinogenicity****Conclusion/Summary** : Based on available data, the classification criteria are not met.**Reproductive toxicity****Conclusion/Summary** : Based on available data, the classification criteria are not met.**Teratogenicity****Conclusion/Summary** : Based on available data, the classification criteria are not met.**Specific target organ toxicity (single exposure)**

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|------------|-------------------|------------------|
| toluene | Category 3 | - | Narcotic effects |
| methanol | Category 1 | - | - |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|------------|-------------------|------------------------------|
| dioctyltin dilaurate | Category 1 | - | immune system |
| toluene | Category 2 | inhalation | central nervous system (CNS) |

Aspiration hazard

| Product/ingredient name | Result |
|-------------------------|--------------------------------|
| toluene | ASPIRATION HAZARD - Category 1 |

Information on 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** : Slightly irritating to the eyes.**Inhalation** : No specific data.**Skin contact** : May cause skin sensitisation.**Ingestion** : No specific data.**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Short term exposure****Potential immediate effects** : May cause skin sensitisation.**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 : Based on available data, the classification criteria are not met.

ARBOSIL® LMS Anthracite

SECTION 11: Toxicological information

- General** : Curing process releases 2-pentanone oxime. 2-Pentanone oxime is classified as harmful if swallowed, causes serious eye irritation and may cause damage to blood/spleen through prolonged/repeated exposure.
Curing process may release a small amount of methanol which is irritating to mucous membranes and has skin drying and narcotic effects.
- 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 | Species | Exposure |
|-------------------------|--------------------------------------|---|----------|
| silicon dioxide | Acute EC50 2.2 g/L Fresh water | Daphnia - Water flea - <i>Daphnia magna</i> - Neonate | 48 hours |
| | Chronic NOEC 12.5 mg/l Fresh water | Daphnia - Water flea - <i>Daphnia magna</i> - Neonate | 21 days |
| toluene | Acute EC50 >433 ppm Marine water | Algae - Diatom - <i>Skeletonema costatum</i> | 96 hours |
| | Acute EC50 11600 µg/l Fresh water | Crustaceans - Scud - <i>Gammarus pseudolimnaeus</i> - Adult | 48 hours |
| methanol | Acute EC50 6000 µg/l Fresh water | Daphnia - Water flea - <i>Daphnia magna</i> - Juvenile (Fledgling, Hatchling, Weanling) | 48 hours |
| | Acute LC50 5500 µg/l Fresh water | Fish - Coho salmon, silver salmon - <i>Oncorhynchus kisutch</i> - Fry | 96 hours |
| | Chronic NOEC 1 mg/l Fresh water | Daphnia - Water flea - <i>Daphnia magna</i> | 21 days |
| | Acute EC50 16.912 mg/l Marine water | Algae - Green algae - <i>Ulva pertusa</i> | 96 hours |
| | Acute LC50 2500000 µg/l Marine water | Crustaceans - Common shrimp, sand shrimp - <i>Crangon crangon</i> - Adult | 48 hours |
| methanol | Acute LC50 3289 mg/l Fresh water | Daphnia - Water flea - <i>Daphnia magna</i> - Neonate | 48 hours |
| | Acute LC50 290 mg/l Fresh water | Fish - Zebra danio - <i>Danio rerio</i> - Egg | 96 hours |
| | Chronic NOEC 9.96 mg/l Marine water | Algae - Green algae - <i>Ulva pertusa</i> | 96 hours |

Conclusion/Summary : Based on available data, the classification criteria are not met.
Curing process releases 2-pentanone oxime. 2-Pentanone oxime is classified as harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| 2-Pentanone, 2,2',2''-[O,O',O''-(methylsilylidyne)trioxime] toluene | - | - | Not readily |
| | - | - | Readily |

12.3 Bioaccumulative potential

ARBOSIL® LMS Anthracite

SECTION 12: Ecological information

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|-------------------------|--------------------|------|-----------|
| Diocetyl tin dilaurate | - | <100 | Low |
| toluene | 2.73 | 90 | Low |
| methanol | -0.77 | <10 | Low |

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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 minimised 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 minimised 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 spilt 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. |

ARBOSIL® LMS Anthracite

SECTION 14: Transport information

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 authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

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

| Product/ingredient name | % | Designation [Usage] |
|--|------|---------------------|
| <input checked="" type="checkbox"/> dioctyltin dilaurate | <0.1 | 20 |
| toluene | ≤0.1 | 48 |
| methanol | <0.1 | 69 |

Labelling : Not applicable.

Seveso Directive

This product is not controlled under the Seveso Directive.

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.

ARBOSIL® LMS Anthracite

SECTION 15: Regulatory information**UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

Inventory list

| | |
|--|--|
| Australia | : Not determined. |
| Canada | : Not determined. |
| China | : 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. |
| 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

| | |
|-------|--|
| H225 | Highly flammable liquid and vapour. |
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H311 | Toxic in contact with skin. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H331 | Toxic if inhaled. |
| H336 | May cause drowsiness or dizziness. |
| H360D | May damage the unborn child. |
| H361d | Suspected of damaging the unborn child. |
| H370 | Causes damage to organs. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H412 | Harmful to aquatic life with long lasting effects. |

Full text of classifications

ARBOSIL® LMS Anthracite

SECTION 16: Other information

| | |
|-------------------|---|
| Acute Tox. 3 | ACUTE TOXICITY - Category 3 |
| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| Aquatic Chronic 3 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 |
| Asp. Tox. 1 | ASPIRATION HAZARD - Category 1 |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |
| Flam. Liq. 2 | FLAMMABLE LIQUIDS - Category 2 |
| Repr. 1B | REPRODUCTIVE TOXICITY - Category 1B |
| Repr. 2 | REPRODUCTIVE TOXICITY - Category 2 |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| STOT RE 1 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1 |
| STOT RE 2 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 |
| STOT SE 1 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |

Date of printing : 31 January 2024

Date of issue/ Date of revision : 31 January 2024

Date of previous issue : 10 November 2023

Version : 2

Notice to reader

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.