Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

# SAFETY DATA SHEET

Alpha OM340 771 78-5-M04 S30 96.5sn/3.0Ag/0.5Cu 0.090kg

FOR REGULATORY AND SDS QUESTIONS (EUROPE)
CALL *THE PRODUCT STEWARDSHIP LINE*
*(ENGLISH SPEAKING ONLY)*
*+1-908-791-2336 (15:00 – 21:00 CET; MONDAY-FRIDAY)*

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

### 1.1 Product identifier

**Product name** : Alpha OM340 771 78-5-M04 S30 96.5sn/3.0Ag/0.5Cu 0.090kg

**Product code** : 157927

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

| Identified uses |
|---|
| soldering<br>Industrial applications. |

### 1.3 Details of the supplier of the safety data sheet

**e-mail address of person responsible for this SDS** : Europeanregulatory@macdermid.com

**Supplier** : Fernox UK Ltd
2 Genesis Business Park
Albert Drive
Sheerwater, Surrey
Woking GU21 5RW

**Information contact** : Contact info: Tel: +44 (0) 330 100 7750
e-mail: salesEU@AlphaAssembly.com

### 1.4 Emergency telephone number

**National advisory body/Poison Centre**

**Telephone number** :

**Supplier**

**Telephone number** : Carechem24: (+44) 1865 407333; (+44) 1235 239 670 (across Europe)

**Hours of operation** : 24/7

# SECTION 2: Hazards identification

## 2.1 Classification of the substance or mixture

**Product definition** : Mixture

**Classification according to UK CLP/GHS**

Eye Dam. 1, H318
Aquatic Chronic 2, H411

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

**Ingredients of unknown toxicity** : 4.7 (oral), 4.7 (dermal), 4.7 (inhalation) percent of the mixture consists of component (s) of unknown acute toxicity

See Section 16 for the full text of the H statements declared above.

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

## 2.2 Label elements

**Hazard pictograms** :

**Signal word** : Danger

**Hazard statements** : H318 - Causes serious eye damage.
H411 - Toxic to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention** : P280 - Wear eye or face protection: Recommended: safety glasses with side-shields .
P273 - Avoid release to the environment.

**Response** : P391 - Collect spillage.
P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

**Storage** :

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazardous ingredients** : Carboxylic acids, di-, C4-6

**Supplemental label elements** : Not applicable.

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

**Special packaging requirements**

## 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** : None known.

# SECTION 3: Composition/information on ingredients

**3.2 Mixtures** : Mixture

| Product/ingredient name | Identifiers | % | Classification | Type |
|---|---|---|---|---|
| tin | REACH #: 01-2119486474-28<br>EC: 231-141-8<br>CAS: 7440-31-5 | ≥75 - ≤90 | Not classified. | [2] |
| complex reaction mass of Chinese gum rosin post reacted with acrylic acid | REACH #: 01-2120117087-62<br>CAS: 144413-22-9<br>Index: 607-682-00-4 | ≤5 | Aquatic Chronic 4, H413 | [1] |
| silver powder Form < 1 mm | REACH #: 01-2119555669-21<br>EC: 231-131-3<br>CAS: 7440-22-4 | <2.5 | Aquatic Acute 1, H400 (M=10)<br>Aquatic Chronic 1, H410 (M=10) | [1] [2] |
| Carboxylic acids, di-, C4-6 | REACH #: 01-2119458864-25<br>EC: 271-678-5<br>CAS: 68603-87-2 | ≤3 | Eye Dam. 1, H318 | [1] |
| 2-ethylimidazole | REACH #: 01-2120757447-44<br>EC: 214-011-5<br>CAS: 1072-62-4 | <3 | Acute Tox. 4, H302<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318 | [1] |
| 2-decyltetradecanoic acid | REACH #: 01-2120212152-77<br>EC: 298-190-5<br>CAS: 93778-52-0 | ≤3 | Aquatic Chronic 4, H413 | [1] |
| 2,2-bis[[(2-hexyl-1-oxodecyl)oxy] methyl]-1,3-propanediyl bis (2-hexyldecanoate) | REACH #: 01-2120771015-61<br>EC: 262-334-5<br>CAS: 60623-04-3 | ≤3 | Aquatic Chronic 4, H413 | [1] |
| copper | REACH #: 01-2119480154-42<br>EC: 231-159-6<br>CAS: 7440-50-8 | ≤1 | Not classified. | [2] |
| | | | **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** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

**Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie,

## SECTION 4: First aid measures

belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Skin contact** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

**Over-exposure signs/symptoms**

**Eye contact** : Adverse symptoms may include the following:
pain
watering
redness

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

**Ingestion** : Adverse symptoms may include the following:
stomach pains

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

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** : No specific treatment.

## 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.

### 5.2 Special hazards arising from the substance or mixture

**Hazards from the substance or mixture** : This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

## SECTION 5: Firefighting measures

**Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

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

**Small spill** : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled 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). Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

# SECTION 7: Handling and storage

**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

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. Store locked up. 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** : No specific measures identified.

**Industrial sector specific solutions** : No specific measures identified.

# SECTION 8: Exposure controls/personal protection

## 8.1 Control parameters

### Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|---|---|
| tin | **EH40/2005 WELs (United Kingdom (UK), 2002).**<br>TWA: 2 mg/m³ 8 hours.<br>STEL: 4 mg/m³ 15 minutes. |
| silver powder Form < 1 mm | **EH40/2005 WELs (United Kingdom (UK), 1/2020).**<br>TWA: 0.1 mg/m³ 8 hours. |
| copper | **EH40/2005 WELs (United Kingdom (UK), 1/2020). Notes: as Cu**<br>TWA: 0.2 mg/m³, (as Cu) 8 hours. Form: Fume |

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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.

### EU DNELs/DMELs

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|---|---|---|---|---|---|
| tin | DNEL | Long term Oral | 5 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 10 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 17 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 71 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 80 mg/kg bw/day | General population | Systemic |
| silver powder Form < 1 mm | DNEL | Long term Inhalation | 0.04 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 0.1 mg/m³ | Workers | Systemic |
| | DNEL | Long term Oral | 1.2 mg/kg bw/day | General population | Systemic |
| Carboxylic acids, di-, C4-6 | DNEL | Long term Oral | 0.43 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 0.43 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term | 0.76 mg/m³ | General | Systemic |

## SECTION 8: Exposure controls/personal protection

| | | | | | |
|---|---|---|---|---|---|
| | | Inhalation | | population | |
| | DNEL | Long term Dermal | 1.22 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 4.3 mg/m³ | Workers | Systemic |
| copper | DNEL | Long term Oral | 0.041 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Inhalation | 1 mg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 1 mg/m³ | General population | Local |
| | DNEL | Long term Dermal | 137 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 137 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Dermal | 273 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Dermal | 273 mg/kg bw/day | Workers | Systemic |

**EU PNECs**

No PNECs available

### 8.2 Exposure controls

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**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: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead. Recommended: 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. < 1 hour (breakthrough time): disposable vinyl

**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. Recommended: overall

**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** : 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. Recommended: None assigned.

## SECTION 8: Exposure controls/personal protection

**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** : Grey.

**Odour** : There are no data available on the mixture itself.

**Odour threshold** : There are no data available on the mixture itself.

**Melting point/freezing point** : There are no data available on the mixture itself.

**Initial boiling point and boiling range** : Not available.

**Flammability (solid, gas)** : There are no data available on the mixture itself.

**Upper/lower flammability or explosive limits** : Not applicable.

**Flash point** : Not applicable.

**Auto-ignition temperature** : Not applicable.

**Decomposition temperature** : There are no data available on the mixture itself.

**pH** : No specific data.

**Viscosity** : Testing not technically possible.

**Solubility(ies)** :

Not available.

**Solubility in water** : There are no data available on the mixture itself.

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

**Vapour pressure** : Not available.

**Evaporation rate** : There are no data available on the mixture itself.

**Relative density** : There are no data available on the mixture itself.

**Vapour density** : Not relevant/applicable due to nature of the product.

**Explosive properties** : There are no data available on the mixture itself.

**Oxidising properties** : There are no data available on the mixture itself.

**Particle characteristics**

**Median particle size** : Not relevant/applicable due to nature of the product.

### 9.2 Other information

**SAPT** : Not relevant/applicable due to nature of the product.

## SECTION 10: Stability and reactivity

**10.1 Reactivity** : Not available.

**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.

## SECTION 10: Stability and reactivity

**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

**Conclusion/Summary** : Not tested

#### 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) |
|---|---|---|---|---|---|
| CNP OM-340 771 78-5-M04 Bulk 96.5Sn/3.0Ag/0.5Cu | 38520.8 | N/A | N/A | N/A | N/A |
| 2-ethylimidazole | 500 | N/A | N/A | N/A | N/A |

#### Irritation/Corrosion

**Conclusion/Summary**

**Skin** : Not tested

**Eyes** : Not tested

**Respiratory** : Not tested

#### Sensitisation

**Conclusion/Summary**

**Skin** : Not tested

**Respiratory** : Not tested

#### Mutagenicity

**Conclusion/Summary** : Not tested

#### Carcinogenicity

**Conclusion/Summary** : Not tested

#### Reproductive toxicity

**Conclusion/Summary** : Not tested

#### Teratogenicity

**Conclusion/Summary** : Not tested

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.

**Information on likely routes of exposure** : Not tested

#### Potential acute health effects

**Eye contact** : Causes serious eye damage.

**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.

# SECTION 11: Toxicological information

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:
pain
watering
redness

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

**Ingestion** : Adverse symptoms may include the following:
stomach pains

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

### Short term exposure

**Potential immediate effects** : Not available.

**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** : 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** : No known significant effects or critical hazards.

# SECTION 12: Ecological information

## 12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| silver powder Form < 1 mm | Acute EC50 1.4 µg/l Marine water | Algae - Cryptomonad - Chroomonas sp. | 4 days |
| | Acute EC50 0.24 µg/l Fresh water | Daphnia - Water flea - Daphnia magna | 48 hours |
| | Acute LC50 11 µg/l Fresh water | Crustaceans - Water flea - Ceriodaphnia reticulata | 48 hours |
| | Acute LC50 2.13 µg/l Fresh water | Fish - Fathead minnow - Pimephales promelas | 96 hours |
| | Chronic NOEC 5 mg/l Marine water | Algae - Dinoflagellate - Glenodinium halli | 72 hours |
| copper | Acute EC50 21 µg/l Marine water | Algae - Diatom - Nitzschia closterium - Exponential growth phase | 72 hours |
| | Acute EC50 1100 µg/l Fresh water | Aquatic plants - Duckweed - Lemna minor | 4 days |
| | Acute EC50 1.7 µg/l Fresh water | Crustaceans - Water flea - Ceriodaphnia pulchella - Juvenile (Fledgling, Hatchling, Weanling) | 48 hours |

## SECTION 12: Ecological information

| | | | |
|---|---|---|---|
| | Acute IC50 5.4 mg/l Marine water | Aquatic plants - Plant Kingdom - Plantae - Exponential growth phase | 72 hours |
| | Acute LC50 3.1 µg/l Fresh water | Daphnia - Water flea - Daphnia magna | 48 hours |
| | Chronic EC10 0.032 mg/l Marine water | Algae - Green algae - Ulva pertusa | 4 days |
| | Chronic NOEC 7 mg/l Fresh water | Aquatic plants - Coontail - Ceratophyllum demersum | 3 days |
| | Chronic NOEC 5 µg/l Fresh water | Daphnia - Water flea - Daphnia pulex - Neonate | 21 days |

**Conclusion/Summary** : Ecological testing has not been conducted on this product.

### 12.2 Persistence and degradability

**Conclusion/Summary** : Not available.

### 12.3 Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| complex reaction mass of Chinese gum rosin post reacted with acrylic acid | 6.04 | - | high |
| silver powder Form < 1 mm | - | 70 | low |
| Carboxylic acids, di-, C4-6 | -0.55 | 3.162 | low |
| 2-ethylimidazole | 1.09 | - | low |
| 2-decyltetradecanoic acid | 9.11 | - | high |
| 2,2-bis[[(2-hexyl-1-oxodecyl) oxy]methyl]-1,3-propanediyl bis(2-hexyldecanoate) | 11.03 | - | high |

### 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** : Yes.

**Waste catalogue**

## SECTION 13: Disposal considerations

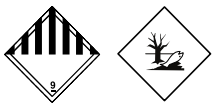
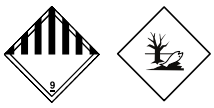
| Waste code | Waste designation |
|---|---|
| 10 08 11 | dross and skimmings other than those mentioned in 10 08 10 |

**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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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 | IMDG | IATA |
|---|---|---|---|
| **14.1 UN number** | UN3077 | UN3077 | UN3077 |
| **14.2 UN proper shipping name** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (silver powder Form < 1 mm) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (silver powder Form < 1 mm) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (silver powder Form < 1 mm) |
| **14.3 Transport hazard class(es)** | 9  | 9  | 9  |
| **14.4 Packing group** | III | III | III |
| **14.5 Environmental hazards** | Yes. | Yes. | Yes. |

**Additional information**

**ADR/RID** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
**Limited quantity** Y
**Tunnel code** (-)

**IMDG** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
**Emergency schedules** F-A, S-F
**IMDG Code Segregation group** SGG7 - Heavy metals and their salts (including their organometallic compounds)

**IATA** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

**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 applicable - not transported in bulk

## 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.

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

#### Seveso Directive - Reporting thresholds

#### Danger criteria

| Category | Notification and MAPP threshold | Safety report threshold |
|---|---|---|
| E2 | 200 tonne | 500 tonne |

#### EU regulations

**Industrial emissions (integrated pollution prevention and control) - Air** : Listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Listed

**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

| Classification | Justification |
|---|---|
| Eye Dam. 1, H318<br>Aquatic Chronic 2, H411 | Calculation method<br>Calculation method |

#### Full text of abbreviated H statements

## SECTION 16: Other information

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H413 | May cause long lasting harmful effects to aquatic life. |

**Full text of classifications**

| | |
|---|---|
| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| Aquatic Acute 1 | SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 1 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 2 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 |
| Aquatic Chronic 4 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 4 |
| Eye Dam. 1 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |

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**Notice to reader**

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**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.**

MacDermid Alpha SDS CLP Europe