SAFETY DATA SHEET



ARBOKOL® 682 Pouring Grade Base

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

| 1.1 Product identifier | |
|-------------------------------|--|
| Product name | : ARBOKOL® 682 Pouring Grade Base |
| Product description | : Base component of: Two-component, epoxy-based adhesive |
| Other means of identification | : Not available. |

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

| Identified uses | |
|--|--------|
| Base component of: Two-component, epoxy-based adhesive | |
| 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. |
|------------------|--|
| <u>Supplier</u> | |

| 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

Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412

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

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

SECTION 2: Hazards identification

| Hazard pictograms | |
|---|---|
| Signal word | : Danger |
| Hazard statements | H314 - Causes severe skin burns and eye damage. H412 - Harmful to aquatic life with long lasting effects. |
| Precautionary statements | |
| Prevention | P280 - Wear protective gloves, protective clothing and eye or face protection. P260 - Do not breathe vapour. P264 - Wash contaminated skin thoroughly after handling. |
| Response | P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P310 - Immediately call a POISON CENTER or doctor. |
| Storage | : Not applicable. |
| Disposal | : Not applicable. |
| 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 requirem | ents |
| 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 | : None known. |

SECTION 3: Composition/information on ingredients

| Product/ingredient name | Identifiers | % | Classification | Туре |
|---|--|-----------|---|------|
| Liquid polysulfide polymer. Mercaptan terminated liquid polymer of diethyleneoxymethane with Sx linkages | CAS: 68611-50-7 | ≥50 - ≤75 | Aquatic Chronic 3, H412 | [1] |
| Limestone | EC: 215-279-6 CAS: 1317-65-3 | ≥25 - ≤50 | Not classified. | [2] |
| 2,4,6-tris(dimethylaminomethyl) phenol | REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2 Index: 603-069-00-0 | ≤10 | Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 | [1] |

SECTION 3: Composition/information on ingredients

| acetic acid | REACH #: 01-2119475328-30 | <1 | Flam. Liq. 3, H226 Skin Corr. 1A, H314 | [1] [2] |
|------------------------------|--|------|---|---------|
| | EC: 200-580-7 CAS: 64-19-7 Index: 607-002-00-6 | | Eye Dam. 1, H318 | |
| carbon black, non respirable | EC: 215-609-9 CAS: 1333-86-4 | ≤0.1 | 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.

<u>Type</u>

[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

| I.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, 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 <u>Over-exposure signs/symptoms</u>

| ARBOKOL® 682 Pouring Grade Base | |
|--|--|
| SECTION 4: First aid | d measures |
| Eye contact | : Adverse symptoms may include the following: pain watering redness |
| Inhalation | : Corrosive to the respiratory tract. coughing |
| 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 immedi | ate 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: Firefigh | ting 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 f | rom the substance or mixture |
| Hazards from the substance or mixture | This material is harmful 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. |
| Hazardous combustion products | Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides Formaldehyde. Ammonia amines hydrogen sulphide Sulphur dioxide |
| 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. |

SECTION 6: Accidental release measures

| 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. |
| 6.3 Methods and material for o | co | ntainment 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. |
|--|---|
| 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 | : 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 |
| acetic acid | EH40/2005 WELs (United Kingdom (UK), 1/2020). |
| | STEL: 50 mg/m ³ 15 minutes. |
| | STEL: 20 ppm 15 minutes. |
| | TWA: 25 mg/m ³ 8 hours. |
| | TWA: 10 ppm 8 hours. |
| carbon black, non respirable | EH40/2005 WELs (United Kingdom (UK), 1/2020). |
| | STEL: 7 mg/m ³ 15 minutes. |
| | TWA: 3.5 mg/m ³ 8 hours. |

Biological exposure indices

No exposure indices known.

| Recommended monitoring | 1 | Reference should be made to appropriate monitoring standards. Reference to |
|------------------------|---|--|
| procedures | | national guidance documents for methods for the determination of hazardous |
| | | substances will also be required. |

DNELs/DMELs

| Product/ingredient name | Туре | Exposure | Value | Population | Effects |
|---------------------------------|------|-------------------|------------------------|------------|----------|
| 2,4,6-tris(dimethylaminomethyl) | DNEL | Long term Oral | 0.075 mg/ | General | Systemic |
| phenol | | | kg bw/day | population | |
| | DNEL | Short term Dermal | 0.075 mg/ | General | Systemic |
| | | | kg bw/day | population | |
| | DNEL | Long term Dermal | 0.075 mg/ | General | Systemic |
| | | | kg bw/day | population | |
| | DNEL | Short term | 0.13 mg/m ³ | General | Systemic |
| | | Inhalation | | population | |
| | DNEL | Long term | 0.13 mg/m ³ | General | Systemic |
| | | Inhalation | | population | |
| | DNEL | Long term Dermal | 0.15 mg/ | Workers | Systemic |
| | | | kg bw/day | | |
| | DNEL | Long term | 0.53 mg/m ³ | Workers | Systemic |
| | | Inhalation | | | |
| | DNEL | Short term Dermal | 0.6 mg/kg | Workers | Systemic |
| | | | bw/day | | |
| | DNEL | Short term | 2.1 mg/m ³ | Workers | Systemic |
| | | Inhalation | | | |
| acetic acid | DNEL | Short term | 25 mg/m³ | General | Local |
| | | Inhalation | | population | |
| | DNEL | Long term | 25 mg/m³ | General | Local |
| | | Inhalation | | population | |
| | DNEL | Short term | 25 mg/m³ | Workers | Local |
| | | Inhalation | | | |
| | DNEL | Long term | 25 mg/m³ | Workers | Local |
| | | Inhalation | _ | | |
| carbon black, non respirable | DNEL | Long term | 0.06 mg/m ³ | General | Systemic |
| | | Inhalation | _ | population | |
| | DNEL | Long term | 1 mg/m³ | Workers | Systemic |
| | | Inhalation | Ŭ | | - |

PNECs

SECTION 8: Exposure controls/personal protection

| | • | • | | |
|---------------------|--------------------|-----------------------|-------------|---------------|
| Product | /ingredient name | Compartment Detail | Value | Method Detail |
| 2,4,6-tris(dimethyl | aminomethyl)phenol | Fresh water | 0.046 mg/l | - |
| | | Fresh water | 0.46 mg/l | - |
| | | Marine water | 0.005 mg/l | - |
| | | Marine water | 0.046 mg/l | - |
| | | Sewage Treatment | 0.2 mg/l | - |
| | | Plant | | |
| | | Fresh water sediment | 0.262 mg/l | - |
| | | Marine water sediment | 0.026 mg/kg | - |
| | | Soil | 0.025 mg/kg | - |

| 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 measu | ires | |
| 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. |
| 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. |
| 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 | : | 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 | : Black. |

| Date of issue/Date of revision | 26 July 2023 | Date of previous issue | : No previous validation | Version : 1 | 7/15 |
|--------------------------------|--------------|------------------------|--------------------------|-------------|------|
|--------------------------------|--------------|------------------------|--------------------------|-------------|------|

SECTION 9: Physical and chemical properties

| Odour | 1 | Mercaptan |
|---|---|-------------------------------|
| Odour threshold | 1 | 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 | 1 | Not applicable. |
| Decomposition temperature | 4 | Not available. |
| рН | 1 | Not available. |
| Viscosity | 1 | Dynamic: 20000 to 60000 mPa·s |
| Solubility in water | 1 | Not available. |
| Partition coefficient: n-octanol/ water | : | Not applicable. |
| Vapour pressure | : | Not available. |
| Relative density | : | 1.4 to 1.45 |
| Vapour density | : | Not applicable. |
| Explosive properties | : | Not available. |
| Oxidising properties | 1 | 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 | Inder normal conditions of storage and use, hazardous reactions will not occur. | | | | | | |
| 10.4 Conditions to avoid | : Keep away from heat and direct sunlight. | | | | | | |
| 10.5 Incompatible materials | : strong acids strong alkalis Strong oxidising materials copper Aluminium. zinc peroxides hypochlorites | | | | | | |
| 10.6 Hazardous decomposition products | Under normal conditions of storage and use, hazardous decomposition products should not be produced. Decomposition products may include the following materials: Sulphur dioxide Hydrogen sulfide Aldehyde. Formaldehyde nitric acid nitrogen oxides Ammonia Corrosive gas. | | | | | | |
| Date of issue/Date of revision | 26 July 2023 Date of previous issue : No previous validation Version : 1 8/15 | | | | | | |

SECTION 10: Stability and reactivity

Toxic gases

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|--|------------------------------------|---|-----------------------------|
| Liquid polysulfide polymer. Mercaptan terminated liquid polymer of diethyleneoxymethane with Sx linkages | LD50 Dermal | Rat | >7800 mg/kg | - |
| 2,4,6-tris (dimethylaminomethyl) phenol | LD50 Oral LD50 Dermal | Rat Rat | >5000 mg/kg 1280 mg/kg | - |
| acetic acid carbon black, non respirable | LD50 Oral LC50 Inhalation Vapour LD50 Dermal LD50 Oral LD50 Oral | Rat Rat Rabbit Rat Rat | 1200 mg/kg 11000 mg/m ³ 1060 mg/kg 3310 mg/kg >15400 mg/kg | - 4 hours - - - |

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) |
|---------------------------------------|------------------|-------------------|--------------------------------|-----------------------------------|--|
| ARBOKOL® 682 Pouring Grade Base | 18794.0 | N/A | N/A | N/A | N/A |
| 2,4,6-tris(dimethylaminomethyl)phenol | 1200 | N/A | N/A | N/A | N/A |
| acetic acid | 3310 | N/A | N/A | N/A | N/A |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-----------------------------|------------------------|---------|-------|---------------|--------------------|
| 2,4,6-tris | Eyes - Severe irritant | Rabbit | - | 24 hours 50 | - |
| (dimethylaminomethyl)phenol | | | | ug | |
| | Skin - Mild irritant | Rat | - | 0.025 MI | - |
| | Skin - Severe irritant | Rabbit | - | 24 hours 2 | - |
| | | | | mg | |
| | Skin - Severe irritant | Rat | - | 0.25 MI | - |
| acetic acid | Eyes - Mild irritant | Rabbit | - | 0.5 minutes 5 | - |
| | | | | mg | |
| | Skin - Mild irritant | Human | - | 24 hours 50 | - |
| | | | | mg | |
| | Skin - Mild irritant | Rabbit | - | 24 hours 50 | - |
| | | | | mg | |
| | Skin - Severe irritant | Rabbit | - | 525 mg | - |

| Conclusion/Summary | | | | |
|--------------------------------|-----------------|----------------------------|-----------------------------|-----------|
| Skin | : Skin Corr. 1C | | | |
| Eyes | : Eye Dam. 1 | | | |
| Respiratory | : Based on ava | ilable data, the classific | ation criteria are not met. | |
| Sensitisation | | | | |
| Conclusion/Summary | | | | |
| Skin | : Based on ava | ilable data, the classific | ation criteria are not met. | |
| Respiratory | : Based on ava | ilable data, the classific | ation criteria are not met. | |
| Mutagenicity | | | | |
| Conclusion/Summary | : Based on ava | ilable data, the classific | ation criteria are not met. | |
| Carcinogenicity | | | | |
| Date of issue/Date of revision | 26 July 2023 | Date of previous issue | No previous validation | Version 1 |

Date of issue/Date of revision

| SECTION 11: Toxico | logical information |
|--------------------------------|---|
| 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 toxicit | <u>y (single exposure)</u> |
| Not available. | |
| Specific target organ toxicit | y (repeated exposure) |
| Not available. | |
| Aspiration hazard | |
| Not available. | |
| | |
| Information on likely routes | : Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes. |
| of exposure | - Routes of only antiopatod. Oral, Dermal, initiation, Eyes. |
| Potential acute health effects | |
| Eye contact | : Causes serious eye damage. |
| Inhalation | : No known significant effects or critical hazards. |
| Skin contact | : Causes severe burns. |
| Ingestion | : No known significant effects or critical hazards. |
| | |
| Symptoms related to the phy | sical, chemical and toxicological characteristics |
| Eye contact | : Adverse symptoms may include the following: |
| | pain watering |
| | redness |
| Inhalation | : Corrosive to the respiratory tract. |
| | coughing |
| Skin contact | : Adverse symptoms may include the following: |
| | pain or irritation redness |
| | blistering may occur |
| Ingestion | : Adverse symptoms may include the following: |
| | stomach pains |
| | |
| | ts as well as chronic effects from short and long-term exposure |
| Short term exposure | Causes sovers skip burns and ave demage |
| Potential immediate effects | : Causes severe skin burns and eye damage. |
| Potential delayed effects | : Not available. |
| Long term exposure | |
| Potential immediate | : Not available. |
| effects | |
| Potential delayed effects | : Not available. |
| Potential chronic health effe | <u>ects</u> |
| 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. |
| | |

SECTION 11: Toxicological information

Other information

: Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|--|------------------------------------|---|----------|
| Liquid polysulfide polymer. Mercaptan terminated liquid polymer of diethyleneoxymethane with Sx linkages | Acute EC50 >20 mg/l Fresh water | Daphnia | 48 hours |
| 2,4,6-tris (dimethylaminomethyl) phenol | Acute EC50 46.7 mg/l Fresh water | Algae - Raphidocelis subcapitata | 72 hours |
| | Acute EC50 >100 mg/l Fresh water | Daphnia - <i>Daphnia magna</i> | 48 hours |
| | Acute LC50 >100 mg/l Fresh water | Fish - Cyprinus carpio | 96 hours |
| | Chronic EC10 25.1 mg/l Fresh water | Algae - Raphidocelis subcapitata | 72 hours |
| acetic acid | Acute EC50 73400 µg/l Fresh water | Algae - Diatom - Navicula seminulum | 96 hours |
| | Acute EC50 65000 µg/l Fresh water | Daphnia - Water flea - <i>Daphnia</i> <i>magna</i> - Neonate | 48 hours |
| | Acute LC50 32 mg/l Marine water | Crustaceans - Brine shrimp - Artemia salina | 48 hours |
| | Acute LC50 75000 µg/l Fresh water | Fish - Bluegill - <i>Lepomis</i> macrochirus | 96 hours |
| carbon black, non respirable | Acute EC50 37.563 mg/l Fresh water | Daphnia - Water flea - <i>Daphnia</i> <i>magna</i> - Neonate | 48 hours |

12.2 Persistence and degradability

Conclusion/Summary

: Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|-------------------|------------|----------------------------|
| Liquid polysulfide polymer. Mercaptan terminated liquid polymer of diethyleneoxymethane with Sx linkages 2,4,6-tris (dimethylaminomethyl) phenol | - | - | Not readily Not readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|---|--------|------|-----------|
| 2,4,6-tris (dimethylaminomethyl) phenol | 0.219 | - | Low |
| acetic acid | -0.17 | 3.16 | Low |

12.4 Mobility in soil

| Soil/water partition coefficient (Koc) | : 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.

SECTION 12: Ecological information

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 | |
| Waste code | Waste designation |
| 08 04 09* | waste adhesives and sealants containing organic solvents or other hazardous substances |
| 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 | ADN | IMDG | ΙΑΤΑ |
|------------------------------------|--|--|--|---|
| 14.1 UN number | UN3263 | UN3263 | UN3263 | UN3263 |
| 14.2 UN proper shipping name | CORROSIVE SOLID, BASIC, ORGANIC, N. O.S. (2,4,6-tris (dimethylaminomethyl) phenol) | CORROSIVE SOLID, BASIC, ORGANIC, N. O.S. (2,4,6-tris (dimethylaminomethyl) phenol) | CORROSIVE SOLID, BASIC, ORGANIC, N. O.S. (2,4,6-tris (dimethylaminomethyl) phenol) | Corrosive solid, basic, organic, n.o.s. (2,4,6-tris (dimethylaminomethyl) phenol) |
| 14.3 Transport hazard class(es) | 8 | 8 | 8 | 8 |
| 14.4 Packing group | Ш | Ш | Ш | Ш |
| 14.5 Environmental hazards | No. | No. | No. | No. |
| Additional informati | on | | 1 | 1 |
| ADR/RID | Limited qu Special pro Tunnel coo | ovisions 274 | | |
| IMDG | | <u>/ schedules</u> F-A, S-B ovisions 223, 274 | | |

| SECTION 14: Transp | port information |
|---|---|
| ΙΑΤΑ | : <u>Quantity limitation</u> Passenger and Cargo Aircraft: 25 kg. Packaging instructions: 860. Cargo Aircraft Only: 100 kg. Packaging instructions: 864. Limited Quantities - Passenger Aircraft: 5 kg. Packaging instructions: Y845. <u>Special provisions</u> A3, A803 |
| 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

No listed substance

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 | <u>on</u> | 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)

SECTION 15: Regulatory information

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

| Inventory list | | |
|------------------------------------|---|--|
| Australia | 1 | All components are listed or exempted. |
| Canada | : | At least one component is not listed in DSL but all such components are listed in NDSL. |
| China | 1 | All components are listed or exempted. |
| Eurasian Economic Union | 1 | Russian Federation inventory: All components are listed or exempted. |
| Japan | : | Japan inventory (CSCL): Not determined. Japan inventory (ISHL): Not determined. |
| New Zealand | 1 | All components are listed or exempted. |
| Philippines | 1 | All components are listed or exempted. |
| Republic of Korea | 1 | All components are listed or exempted. |
| Taiwan | 1 | All components are listed or exempted. |
| Thailand | 1 | All components are listed or exempted. |
| Turkey | 1 | Not determined. |
| United States | 1 | All components are listed or exempted. |
| Viet Nam | 1 | All components are listed or exempted. |
| 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 | 3 | |
|----------------------------|---|---|
| | | 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 | Calculation method Calculation method Calculation method |

Full text of abbreviated H statements

| H226 | Flammable liquid and vapour. |
|------|--|
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H412 | Harmful to aquatic life with long lasting effects. |

Full text of classifications

SECTION 16: Other information

| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
|------------------------|---|
| Aquatic Chronic 3 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 |
| Eye Dam. 1 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 |
| Flam. Liq. 3 | FLAMMABLE LIQUIDS - Category 3 |
| Skin Corr. 1A | SKIN CORROSION/IRRITATION - Category 1A |
| Skin Corr. 1C | SKIN CORROSION/IRRITATION - Category 1C |
| Date of printing | : 26 July 2023 |
| Date of issue/ Date of | : 26 July 2023 |
| revision | |
| Date of previous issue | e : No previous validation |
| Version | : 1 |
| Notice to reader | |

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.