# Safety Data Sheet



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|---|---|---|---|
| **Document group:** | 44-4924-5 | **Version number:** | 3.00 |
| **Revision date:** | 17/06/2025 | **Supersedes date:** | 29/04/2025 |
| **Transportation version number:** | | | |

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006), as amended for GB.

## IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**1.1. Product identifier**
Aerospace Sealant AC-730 B-1/2

**Product Identification Numbers**
75-0002-0592-4 75-0002-0594-0

7100319006 7100319024

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

**Identified uses**
Sealant

**1.3. Details of the supplier of the safety data sheet**

**Address:** 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.
**Telephone:** +44 (0)1344 858 000
**E Mail:** ner-productstewardship@mmm.com

**Website:** www.3M.com/uk

**1.4. Emergency telephone number**
+44 (0)1344 858 000

**This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet for each of these components is included. Please do not separate the component Safety Data Sheets from this cover page. The document numbers of the MSDSs for components of this product are:**

30-2761-2, 44-4845-2

## TRANSPORTATION INFORMATION

Refer to section 14 of the kit components for transport information.

# KIT LABEL

**2.1. Classification of the substance or mixture**
**The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain**

**CLASSIFICATION:**
Acute Toxicity, Category 4 - Acute Tox. 4; H302
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318
Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373
Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

**2.2. Label elements**
**The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain**

**SIGNAL WORD**
DANGER.

**Symbols**
GHS05 (Corrosion) |GHS07 (Exclamation mark) |GHS08 (Health Hazard) |GHS09 (Environment) |

**Pictograms**

**Contains:**
Dipotassium oxide; manganese dioxide; Disodium oxide

**HAZARD STATEMENTS:**

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H373 | May cause damage to organs through prolonged or repeated exposure: nervous system. |
| H411 | Toxic to aquatic life with long lasting effects. |

**PRECAUTIONARY STATEMENTS**

**Prevention:**

| | |
|---|---|
| P260A | Do not breathe vapours. |
| P273 | Avoid release to the environment. |
| P280A | Wear eye/face protection. |

**Response:**

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

**For containers not exceeding 125 ml the following Hazard and Precautionary statements may be used:**

**<=125 ml Hazard statements**

| | |
|---|---|
| H318 | Causes serious eye damage. |

**<=125 ml Precautionary statements**

**Prevention:**

| | |
|---|---|
| P260A | Do not breathe vapours. |
| P280A | Wear eye/face protection. |

**Response:**

| | |
|---|---|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTRE or doctor/physician. |
| EUH208 | Contains Formaldehyde, oligomeric reaction products with phenol. \| bis-[4-(2,3-epoxipropoxi)phenyl]propane. \| formaldehyde.May produce an allergic reaction. |

Refer to Safety Data Sheet for component % unknown values (www.3M.com/msds).

**Revision information:**
Kit: Component document group number(s) information was modified.
Section 2: <125ml Precautionary - Prevention information was modified.

# Safety Data Sheet



| | | | |
|---|---|---|---|
| **Document group:** | 30-2761-2 | **Version number:** | 13.01 |
| **Revision date:** | 27/11/2025 | **Supersedes date:** | 25/11/2025 |

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006), as amended for GB.

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

**1.1. Product identifier**
3M™ Aerospace Sealant AC-730 B-1/2, B-2, and B-6 Base

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

**Identified uses**
Sealant

**1.3. Details of the supplier of the safety data sheet**

| | |
|---|---|
| **Address:** | 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT. |
| **Telephone:** | +44 (0)1344 858 000 |
| **E Mail:** | ner-productstewardship@mmm.com |
| **Website:** | www.3M.com/uk |

**1.4. Emergency telephone number**
+44 (0)1344 858 000

## SECTION 2: Hazard identification

**2.1. Classification of the substance or mixture**
**The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain**

The health and environmental classifications of this material have been derived using the calculation method, except in cases where test data are available or the physical form impacts classification. Classification(s) based on test data or physical form are noted below, if applicable.

**CLASSIFICATION:**
Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

**2.2. Label elements**
**The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain**

**Symbols**
GHS09 (Environment) |

**Pictograms**

**HAZARD STATEMENTS:**

| | |
|---|---|
| H411 | Toxic to aquatic life with long lasting effects. |

**PRECAUTIONARY STATEMENTS**

**Prevention:**

| | |
|---|---|
| P273 | Avoid release to the environment. |

**Response:**

| | |
|---|---|
| P391 | Collect spillage. |

**For containers not exceeding 125 ml the following Hazard and Precautionary statements may be used:**

No hazard statements are required for containers <=125 mL.
No precautionary statements are required for containers <=125 mL.

**SUPPLEMENTAL INFORMATION:**

**Supplemental Hazard Statements:**

| | |
|---|---|
| EUH208 | Contains Formaldehyde, oligomeric reaction products with phenol. \| bis-[4-(2,3-epoxipropoxi)phenyl]propane. \| formaldehyde. May produce an allergic reaction. |

Contains 69% of components with unknown hazards to the aquatic environment.

**2.3. Other hazards**

None known.
This material does not contain any substances that are assessed to be a PBT or vPvB

## SECTION 3: Composition/information on ingredients

**3.1. Substances**
Not applicable

**3.2. Mixtures**

| Ingredient | Identifier(s) | % | Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB |
|---|---|---|---|
| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced | (CAS-No.) 68611-50-7 | 60 - 70 | Substance not classified as hazardous |
| Calcium carbonate | (CAS-No.) 471-34-1 | 20 - 30 | Substance with a national occupational |

| | | | |
|---|---|---|---|
| | (EC-No.) 207-439-9 | | exposure limit |
| trizinc bis(orthophosphate) | (CAS-No.) 7779-90-0<br>(EC-No.) 231-944-3 | < 5 | Aquatic Acute 1, H400,M=10<br>Aquatic Chronic 1, H410,M=10 |
| FATTY ACIDS, C14-18 AND C16-18-UNSATD. | (CAS-No.) 67701-06-8<br>(EC-No.) 266-930-6 | < 2 | Substance not classified as hazardous |
| Formaldehyde, oligomeric reaction products with phenol | (CAS-No.) 9003-35-4<br>(EC-No.) 500-005-2 | < 1 | Skin Sens. 1, H317 |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | (CAS-No.) 1675-54-3<br>(EC-No.) 216-823-5 | < 0.2 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317<br>Aquatic Chronic 2, H411 |
| formaldehyde | (CAS-No.) 50-00-0<br>(EC-No.) 200-001-8 | < 0.04 | Acute Tox. 2, H330<br>EUH071<br>Acute Tox. 4, H302<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1A, H317<br>Muta. 2, H341<br>Carc. 1B, H350<br>Nota B,D,F<br>Acute Tox. 3, H311 |
| lead powder; [particle diameter < 1 mm] | (CAS-No.) 7439-92-1<br>(EC-No.) 231-100-4 | < 0.002 | Repr. 1A, H360FD<br>Lact., H362<br>Aquatic Acute 1, H400,M=1<br>Aquatic Chronic 1, H410,M=10<br>STOT RE 2, H373<br>Repr. 1A, H360FD |

Please see section 16 for the full text of any H statements referred to in this section

**Specific Concentration Limits**

| Ingredient | Identifier(s) | Specific Concentration Limits |
|---|---|---|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | (CAS-No.) 1675-54-3<br>(EC-No.) 216-823-5 | (C >= 5%) Skin Irrit. 2, H315<br>(C >= 5%) Eye Irrit. 2, H319 |
| formaldehyde | (CAS-No.) 50-00-0<br>(EC-No.) 200-001-8 | (C >= 25%)EUH071<br>(C >= 25%) Skin Corr. 1B, H314<br>(5% =< C < 25%) Skin Irrit. 2, H315<br>(C >= 25%) Eye Dam. 1, H318<br>(5% =< C < 25%) Eye Irrit. 2, H319<br>(C >= 0.2%) Skin Sens. 1A, H317<br>(5% =< C < 25%) STOT SE 3, H335 |
| lead powder; [particle diameter < 1 mm] | (CAS-No.) 7439-92-1<br>(EC-No.) 231-100-4 | (C >= 0.03%) Repr. 1A, H360D |

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

## SECTION 4: First aid measures

**4.1. Description of first aid measures**

**Inhalation**
Remove person to fresh air. If you feel unwell, get medical attention.

**Skin contact**
Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

**Eye contact**
If exposed, flush eyes with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms develop, get medical attention.

**If swallowed**
Rinse mouth. If you feel unwell, get medical attention.

**4.2. Most important symptoms and effects, both acute and delayed**
No critical symptoms or effects. See Section 11.1, information on toxicological effects.

**4.3. Indication of any immediate medical attention and special treatment required**
Not applicable

## SECTION 5: Fire-fighting measures

**5.1. Extinguishing media**
In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

**5.2. Special hazards arising from the substance or mixture**
None inherent in this product.

**Hazardous Decomposition or By-Products**

| Substance | Condition |
|---|---|
| formaldehyde | During combustion. |
| Carbon monoxide | During combustion. |
| Carbon dioxide. | During combustion. |

**5.3. Advice for fire-fighters**
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS. Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide

mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice.

**6.2. Environmental precautions**
Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

**6.3. Methods and material for containment and cleaning up**
Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

**6.4. Reference to other sections**
Refer to Section 8 and Section 13 for more information

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**
Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse.

**7.2. Conditions for safe storage including any incompatibilities**
Store away from acids. Store away from strong bases.

**7.3. Specific end use(s)**
See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

## SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**

**Occupational exposure limits**
If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

| Ingredient | CAS Nbr | Agency | Limit type | Additional comments |
|---|---|---|---|---|
| Dust, inhalable dust | 471-34-1 | UK HSE | TWA(as respirable dust):4 mg/m3;TWA(as inhalable dust):10 mg/m3 | |
| formaldehyde | 50-00-0 | UK HSE | TWA:2.5 mg/m3(2 ppm);STEL:2.5 mg/m3(2 ppm) | |
| lead powder; [particle diameter < 1 mm] | 7439-92-1 | UK HSE | TWA(as Pb):0.15 mg/m3 | |

UK HSE : UK Health and Safety Commission
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

**Biological limit values**
No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

**8.2. Exposure controls**

**8.2.1. Engineering controls**
Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

**8.2.2. Personal protective equipment (PPE)**

**Eye/face protection**
None required.

**Skin/hand protection**
Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.
Gloves made from the following material(s) are recommended:

| **Material** | **Thickness (mm)** | **Breakthrough Time** |
|---|---|---|
| Polymer laminate | No data available | No data available |

When only incidental contact is anticipated, alternative glove material(s) may be used. If contact with the glove does occur, remove immediately and replace with a set of new gloves. For incidental contact, gloves made of the following material(s) may be used:Nitrile rubber.

*Applicable Norms/Standards*
Use gloves tested to EN 374

If this product is used in a manner that presents a higher potential for exposure (e.g., spraying, high splash potential, etc.), then use of a protective apron may be necessary. See recommended glove material(s) for determining appropriate apron material(s). If a glove material is not available as an apron, polymer laminate is a suitable option.

**Respiratory protection**

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:
Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

*Applicable Norms/Standards*
Use a respirator conforming to EN 140 or EN 136: filter types A & P

## SECTION 9: Physical and chemical properties

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

| | |
|---|---|
| **Physical state** | Liquid. |
| **Specific Physical Form:** | Thixotropic Paste |
| **Colour** | Tan |
| **Odor** | Pungent Sulphuric |
| **Odour threshold** | *No data available.* |
| **Melting point/freezing point** | *Not applicable.* |
| **Boiling point/boiling range** | *Not applicable.* |
| **Flammability** | Not applicable. |

| | |
|---|---|
| **Flammable Limits(LEL)** | *Not applicable.* |
| **Flammable Limits(UEL)** | *Not applicable.* |
| **Flash point** | >=93.3 ºC [*Test Method:*Closed Cup] |
| **Autoignition temperature** | *No data available.* |
| **Decomposition temperature** | *No data available.* |
| **pH** | *substance/mixture is non-soluble (in water)* |
| **Kinematic Viscosity** | *No data available.* |
| **Water solubility** | Nil |
| **Solubility- non-water** | *No data available.* |
| **Partition coefficient: n-octanol/water** | *No data available.* |
| **Vapour pressure** | *No data available.* |
| **Density** | 1.5 g/ml |
| **Relative density** | 1.5 [*Ref Std:*WATER=1] |
| **Relative Vapour Density** | *No data available.* |
| **Particle Characteristics** | *Not applicable.* |

**9.2. Other information**

**9.2.2 Other safety characteristics**

| | |
|---|---|
| **EU Volatile Organic Compounds** | *No data available.* |
| **Evaporation rate** | *Not applicable.* |
| **Molecular weight** | *Not applicable.* |

## SECTION 10: Stability and reactivity

**10.1 Reactivity**
This material is considered to be non reactive under normal use conditions

**10.2 Chemical stability**
Stable.

**10.3 Possibility of hazardous reactions**
Hazardous polymerisation will not occur.

**10.4 Conditions to avoid**
None known.

**10.5 Incompatible materials**
Reducing agents.
Strong acids.
Strong bases.

**10.6 Hazardous decomposition products**

| **Substance** | **Condition** |
|---|---|
| None known. | |

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

**The information below may not agree with the material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and**

**data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.**

**11.1. Information on hazard classes as defined in the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.**

**Signs and Symptoms of Exposure**

**Based on test data and/or information on the components, this material may produce the following health effects:**

**Inhalation**
Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

**Skin contact**
Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

**Eye contact**
Contact with the eyes during product use is not expected to result in significant irritation.

**Ingestion**
Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

**Toxicological Data**
If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity**

| Name | Route | Species | Value |
|---|---|---|---|
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2- chloroethane] and sodium sulfide (Na2(Sx)), reduced | Dermal | Rat | LD50 > 7,800 mg/kg |
| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2- chloroethane] and sodium sulfide (Na2(Sx)), reduced | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Calcium carbonate | Dermal | Rat | LD50 > 2,000 mg/kg |
| Calcium carbonate | Inhalation-Dust/Mist (4 hours) | Rat | LC50 3 mg/l |
| Calcium carbonate | Ingestion | Rat | LD50 6,450 mg/kg |
| trizinc bis(orthophosphate) | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| trizinc bis(orthophosphate) | Ingestion | Rat | LD50 > 5,000 mg/kg |
| FATTY ACIDS, C14-18 AND C16-18-UNSATD. | Ingestion | Rat | LD50 > 2,000 mg/kg |
| FATTY ACIDS, C14-18 AND C16-18-UNSATD. | Dermal | similar compounds | LD50 > 2,000 mg/kg |
| Formaldehyde, oligomeric reaction products with phenol | Dermal | Rat | LD50 > 2,000 mg/kg |
| Formaldehyde, oligomeric reaction products with phenol | Ingestion | Rat | LD50 > 2,900 mg/kg |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Dermal | Rat | LD50 > 1,600 mg/kg |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion | Rat | LD50 > 1,000 mg/kg |
| formaldehyde | Dermal | Rabbit | LD50 270 mg/kg |
| formaldehyde | Inhalation-Gas (4 hours) | Rat | LC50 470 ppm |
| formaldehyde | Ingestion | Rat | LD50 800 mg/kg |
| lead powder; [particle diameter < 1 mm] | Dermal | | LD50 estimated to be 2,000 - 5,000 mg/kg |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

| Name | Species | Value |
|---|---|---|
| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced | Rabbit | No significant irritation |
| Calcium carbonate | Rabbit | No significant irritation |
| FATTY ACIDS, C14-18 AND C16-18-UNSATD. | similar compounds | No significant irritation |
| Formaldehyde, oligomeric reaction products with phenol | Human and animal | Mild irritant |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Rabbit | Mild irritant |
| formaldehyde | official classification | Corrosive |
| lead powder; [particle diameter < 1 mm] | similar compounds | No significant irritation |

**Serious Eye Damage/Irritation**

| Name | Species | Value |
|---|---|---|
| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced | Rabbit | No significant irritation |
| Calcium carbonate | Rabbit | No significant irritation |
| FATTY ACIDS, C14-18 AND C16-18-UNSATD. | similar compounds | Mild irritant |
| Formaldehyde, oligomeric reaction products with phenol | Human and animal | Moderate irritant |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Rabbit | Moderate irritant |
| formaldehyde | official classification | Corrosive |
| lead powder; [particle diameter < 1 mm] | similar compounds | Mild irritant |

**Skin Sensitisation**

| Name | Species | Value |
|---|---|---|
| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced | | Not classified |
| FATTY ACIDS, C14-18 AND C16-18-UNSATD. | similar compounds | Not classified |
| Formaldehyde, oligomeric reaction products with phenol | Human and animal | Sensitising |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Human and animal | Sensitising |
| formaldehyde | Guinea pig | Sensitising |

**Respiratory Sensitisation**

| Name | Species | Value |
|---|---|---|
| Formaldehyde, oligomeric reaction products with phenol | Human | Not classified |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Human | Not classified |
| formaldehyde | Human | Some positive data exist, but the data are not sufficient for classification |

### Germ Cell Mutagenicity

| Name | Route | Value |
|---|---|---|
| FATTY ACIDS, C14-18 AND C16-18-UNSATD. | In Vitro | Not mutagenic |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | In vivo | Not mutagenic |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| formaldehyde | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| formaldehyde | In vivo | Mutagenic |
| lead powder; [particle diameter < 1 mm] | In vivo | Some positive data exist, but the data are not sufficient for classification |

### Carcinogenicity

| Name | Route | Species | Value |
|---|---|---|---|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Dermal | Mouse | Some positive data exist, but the data are not sufficient for classification |
| formaldehyde | Not specified. | Human and animal | Carcinogenic. |
| lead powder; [particle diameter < 1 mm] | Not specified. | official classification | Carcinogenic. |

### Reproductive Toxicity

### Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test result | Exposure Duration |
|---|---|---|---|---|---|
| Calcium carbonate | Ingestion | Not classified for development | Rat | NOAEL 625 mg/kg/day | premating & during gestation |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion | Not classified for female reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion | Not classified for male reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Dermal | Not classified for development | Rabbit | NOAEL 300 mg/kg/day | during organogenesis |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion | Not classified for development | Rat | NOAEL 750 mg/kg/day | 2 generation |
| formaldehyde | Ingestion | Not classified for male reproduction | Rat | NOAEL 100 mg/kg | not applicable |
| formaldehyde | Inhalation | Not classified for development | Rat | NOAEL 10 ppm | during gestation |
| lead powder; [particle diameter < 1 mm] | Not specified. | Toxic to female reproduction | Human | LOAEL 10 ug/dl blood | |
| lead powder; [particle diameter < 1 mm] | Not specified. | Toxic to male reproduction | Human | LOAEL 37 ug/dl blood | |
| lead powder; [particle diameter < 1 mm] | Not specified. | Toxic to development | Human | NOAEL Not available | |

### Lactation

| Name | Route | Species | Value |
|---|---|---|---|
| lead powder; [particle diameter < 1 mm] | Not specified. | Human | Causes effects on or via lactation |

### Target Organ(s)

### Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| Calcium carbonate | Inhalation | respiratory system | Not classified | Rat | NOAEL 0.812 mg/l | 90 minutes |
| Formaldehyde, oligomeric reaction products with phenol | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human and animal | NOAEL Not available | |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available | |
| formaldehyde | Inhalation | respiratory system | Causes damage to organs | Rat | LOAEL 128 ppm | 6 hours |
| formaldehyde | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
| lead powder; [particle diameter < 1 mm] | Ingestion | nervous system | May cause damage to organs | Human | LOAEL 90 ug/dl blood | poisoning and/or abuse |
| lead powder; [particle diameter < 1 mm] | Ingestion | heart | Not classified | Human | NOAEL Not available | poisoning and/or abuse |

**Specific Target Organ Toxicity - repeated exposure**

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|---|---|---|---|---|---|---|
| Calcium carbonate | Inhalation | respiratory system | Not classified | Human | NOAEL Not available | occupational exposure |
| Formaldehyde, oligomeric reaction products with phenol | Inhalation | respiratory system | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | occupational exposure |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Dermal | liver | Not classified | Rat | NOAEL 1,000 mg/kg/day | 2 years |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Dermal | nervous system | Not classified | Rat | NOAEL 1,000 mg/kg/day | 13 weeks |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Ingestion | auditory system \| heart \| endocrine system \| hematopoietic system \| liver \| eyes \| kidney and/or bladder | Not classified | Rat | NOAEL 1,000 mg/kg/day | 28 days |
| formaldehyde | Dermal | respiratory system | Not classified | Mouse | NOAEL 80 mg/kg/day | 60 weeks |
| formaldehyde | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | NOAEL 0.3 ppm | 28 months |
| formaldehyde | Inhalation | liver | Not classified | Rat | NOAEL 20 ppm | 13 weeks |
| formaldehyde | Inhalation | hematopoietic system | Not classified | Mouse | NOAEL 15 ppm | 3 weeks |
| formaldehyde | Inhalation | nervous system | Not classified | Mouse | NOAEL 10 ppm | 13 weeks |
| formaldehyde | Inhalation | endocrine system \| immune system \| muscles \| kidney and/or bladder | Not classified | Rat | NOAEL 15 ppm | 28 months |
| formaldehyde | Inhalation | gastrointestinal tract | Not classified | Rat | NOAEL 15 ppm | 2 years |
| formaldehyde | Inhalation | eyes \| vascular system | Not classified | Rat | NOAEL 14.3 ppm | 2 years |
| formaldehyde | Inhalation | heart | Not classified | Mouse | NOAEL 14.3 ppm | 2 years |
| formaldehyde | Ingestion | liver | Not classified | Rat | NOAEL 300 mg/kg/day | 2 years |
| formaldehyde | Ingestion | immune system | Not classified | Rat | NOAEL 20 mg/kg/day | 4 weeks |
| formaldehyde | Ingestion | kidney and/or bladder | Not classified | Rat | NOAEL 15 mg/kg/day | 24 months |
| formaldehyde | Ingestion | nervous system | Not classified | Rat | NOAEL 109 mg/kg/day | 2 years |

| | | | | | | |
|---|---|---|---|---|---|---|
| formaldehyde | Ingestion | heart \| endocrine system \| hematopoietic system \| respiratory system \| vascular system | Not classified | Rat | NOAEL 300 mg/kg/day | 2 years |
| formaldehyde | Ingestion | skin \| muscles \| eyes | Not classified | Rat | NOAEL 109 mg/kg/day | 2 years |
| lead powder; [particle diameter < 1 mm] | Inhalation | kidney and/or bladder | May cause damage to organs though prolonged or repeated exposure | Human | LOAEL 60 ug/dl blood | occupational exposure |
| lead powder; [particle diameter < 1 mm] | Inhalation | hematopoietic system | May cause damage to organs though prolonged or repeated exposure | Human | LOAEL 50 ug/dl blood | occupational exposure |
| lead powder; [particle diameter < 1 mm] | Inhalation | gastrointestinal tract \| nervous system | May cause damage to organs though prolonged or repeated exposure | Human | LOAEL 40 ug/dl blood | occupational exposure |
| lead powder; [particle diameter < 1 mm] | Inhalation | heart \| endocrine system \| immune system \| vascular system | Not classified | Human | NOAEL Not available | occupational exposure |
| lead powder; [particle diameter < 1 mm] | Ingestion | bone, teeth, nails, and/or hair | May cause damage to organs though prolonged or repeated exposure | Rat | LOAEL 20 ug/dl blood | 3 months |
| lead powder; [particle diameter < 1 mm] | Ingestion | eyes | May cause damage to organs though prolonged or repeated exposure | Rat | LOAEL 0.5 mg/kg/day | 20 days |
| lead powder; [particle diameter < 1 mm] | Ingestion | gastrointestinal tract | May cause damage to organs though prolonged or repeated exposure | Human | LOAEL 60 ug/dl blood | environmental exposure |
| lead powder; [particle diameter < 1 mm] | Ingestion | hematopoietic system \| kidney and/or bladder | May cause damage to organs though prolonged or repeated exposure | Human | LOAEL 40 ug/dl blood | environmental exposure |
| lead powder; [particle diameter < 1 mm] | Ingestion | nervous system | May cause damage to organs though prolonged or repeated exposure | Human | LOAEL 11 ug/dl blood | environmental exposure |
| lead powder; [particle diameter < 1 mm] | Ingestion | auditory system \| heart \| endocrine system \| vascular system | Not classified | Human | NOAEL Not available | environmental exposure |

**Aspiration Hazard**
For the component/components, either no data is currently available or the data is not sufficient for classification.

**Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.**

**11.2. Information on other hazards**

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

## SECTION 12: Ecological information

**The information below may not agree with the material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.**

**12.1. Toxicity**

No product test data available.

| Material | CAS # | Organism | Type | Exposure | Test endpoint | Test result |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced | 68611-50-7 | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| Calcium carbonate | 471-34-1 | Green algae | Experimental | 72 hours | EC50 | >100 mg/l |
| Calcium carbonate | 471-34-1 | Rainbow trout | Experimental | 96 hours | LC50 | >100 mg/l |
| Calcium carbonate | 471-34-1 | Water flea | Experimental | 48 hours | EC50 | >100 mg/l |
| Calcium carbonate | 471-34-1 | Green algae | Experimental | 72 hours | EC10 | 100 mg/l |
| trizinc bis(orthophosphate) | 7779-90-0 | Activated sludge | Estimated | 3 hours | EC50 | 10 mg/l |
| trizinc bis(orthophosphate) | 7779-90-0 | Green algae | Estimated | 72 hours | EC50 | 0.083 mg/l |
| trizinc bis(orthophosphate) | 7779-90-0 | Invertebrate | Estimated | 48 hours | EC50 | 0.08 mg/l |
| trizinc bis(orthophosphate) | 7779-90-0 | Rainbow trout | Estimated | 96 hours | LC50 | 0.33 mg/l |
| trizinc bis(orthophosphate) | 7779-90-0 | Water flea | Estimated | 48 hours | EC50 | 0.12 mg/l |
| trizinc bis(orthophosphate) | 7779-90-0 | Diatom | Estimated | 72 hours | EC50 | 0.04 mg/l |
| trizinc bis(orthophosphate) | 7779-90-0 | Green algae | Estimated | 72 hours | NOEC | 0.01 mg/l |
| trizinc bis(orthophosphate) | 7779-90-0 | Water flea | Estimated | 7 days | NOEC | 0.026 mg/l |
| FATTY ACIDS, C14-18 AND C16-18-UNSATD. | 67701-06-8 | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| Formaldehyde, oligomeric reaction products with phenol | 9003-35-4 | N/A | Data not available or insufficient for classification | N/A | N/A | n/a |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 | Activated sludge | Analogous Compound | 3 hours | IC50 | >100 mg/l |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 | Rainbow trout | Estimated | 96 hours | LC50 | 2 mg/l |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 | Water flea | Estimated | 48 hours | EC50 | 1.8 mg/l |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 | Green algae | Experimental | 72 hours | ErC50 | >11 mg/l |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 | Green algae | Experimental | 72 hours | NOEC | 4.2 mg/l |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 | Water flea | Experimental | 21 days | NOEC | 0.3 mg/l |
| formaldehyde | 50-00-0 | Green algae | Experimental | 72 hours | ErC50 | 4.89 mg/l |

| | | | | | | |
|---|---|---|---|---|---|---|
| formaldehyde | 50-00-0 | Striped bass | Experimental | 96 hours | LC50 | 6.7 mg/l |
| formaldehyde | 50-00-0 | Water flea | Experimental | 48 hours | EC50 | 5.8 mg/l |
| formaldehyde | 50-00-0 | Medaka | Experimental | 28 days | NOEC | >=48 mg/l |
| formaldehyde | 50-00-0 | Water flea | Experimental | 21 days | NOEC | >=6.4 mg/l |
| formaldehyde | 50-00-0 | Activated sludge | Experimental | 3 hours | EC50 | 19 |
| lead powder; [particle diameter < 1 mm] | 7439-92-1 | Fathead minnow | Analogous Compound | 96 hours | LC50 | 0.0408 mg/l |
| lead powder; [particle diameter < 1 mm] | 7439-92-1 | Green algae | Analogous Compound | 72 hours | ErC50 | 0.0205 mg/l |
| lead powder; [particle diameter < 1 mm] | 7439-92-1 | Water flea | Analogous Compound | 48 hours | LC50 | 0.026 mg/l |
| lead powder; [particle diameter < 1 mm] | 7439-92-1 | Giant Pond Snail | Analogous Compound | 30 days | EC10 | 0.0017 mg/l |
| lead powder; [particle diameter < 1 mm] | 7439-92-1 | Green algae | Analogous Compound | 72 hours | ErC10 | 0.006 mg/l |
| lead powder; [particle diameter < 1 mm] | 7439-92-1 | Rainbow trout | Analogous Compound | 570 days | EC10 | 0.009 mg/l |
| lead powder; [particle diameter < 1 mm] | 7439-92-1 | Activated sludge | Analogous Compound | 24 hours | IC10 | 1.06 mg/l |

### 12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|---|---|---|---|---|---|---|
| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced | 68611-50-7 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| Calcium carbonate | 471-34-1 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| trizinc bis(orthophosphate) | 7779-90-0 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| FATTY ACIDS, C14-18 AND C16-18-UNSATD. | 67701-06-8 | Analogous Compound Biodegradation | 28 days | BOD | 78 %BOD/ThOD | OECD 301C - MITI test (I) |
| Formaldehyde, oligomeric reaction products with phenol | 9003-35-4 | Estimated Biodegradation | 28 days | BOD | 3 %BOD/ThOD | |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 | Experimental Biodegradation | 28 days | BOD | 5 %BOD/COD | OECD 301F - Manometric respirometry |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 | Experimental Hydrolysis | | Hydrolytic half-life (pH 7) | 117 hours (t 1/2) | OECD 111 Hydrolysis func of pH |
| formaldehyde | 50-00-0 | Experimental Biodegradation | 28 days | Dissolv. Organic Carbon Deplet | 99 %removal of DOC | OECD 301A - DOC Die Away Test |
| formaldehyde | 50-00-0 | Experimental Biodegradation | 160 days | BOD | 99.5 %BOD/COD | OECD 303A - Simulated Aerobic |
| lead powder; [particle diameter < | 7439-92-1 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 mm] | | | | | | |

### 12.3 : Bioaccumulative potential

| Material | Cas No. | Test type | Duration | Study Type | Test result | Protocol |
|---|---|---|---|---|---|---|
| Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced | 68611-50-7 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Calcium carbonate | 471-34-1 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| FATTY ACIDS, C14-18 AND C16-18-UNSATD. | 67701-06-8 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Formaldehyde, oligomeric reaction products with phenol | 9003-35-4 | Estimated Bioconcentration | | Bioaccumulation factor | 2.57 | |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 | Experimental Bioconcentration | | Log Kow | 3.242 | OECD 117 log Kow HPLC method |
| formaldehyde | 50-00-0 | Experimental Bioconcentration | | Log Kow | 0.35 | |
| lead powder; [particle diameter < 1 mm] | 7439-92-1 | Experimental BCF - Invertebrate | | Bioaccumulation factor | 1553 | |

### 12.4. Mobility in soil

| Material | Cas No. | Test type | Study Type | Test result | Protocol |
|---|---|---|---|---|---|
| Formaldehyde, oligomeric reaction products with phenol | 9003-35-4 | Experimental Mobility in Soil | Koc | 637 l/kg | OECD 121 Estim. of Koc by HPLC |
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 | Modeled Mobility in Soil | Koc | 450 l/kg | Episuite™ |
| formaldehyde | 50-00-0 | Estimated Mobility in Soil | Koc | 15.9 l/kg | |

### 12.5. Results of the PBT and vPvB assessment

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

### 12.6. Other adverse effects

This material does not contain any substances that are assessed to be an endocrine disruptor for environmental effects

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable

waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

**EU waste code (product as sold)**

08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances

## SECTION 14: Transportation information

| | Ground Transport (ADR) | Air Transport (IATA) | Marine Transport (IMDG) |
|---|---|---|---|
| **14.1 UN number** | UN3082 | UN3082 | UN3082 |
| **14.2 UN proper shipping name** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(ZINC PHOSPHATE; ZINC OXIDE) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(ZINC PHOSPHATE; ZINC OXIDE) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(ZINC PHOSPHATE; ZINC OXIDE) |
| **14.3 Transport hazard class(es)** | 9 | 9 | 9 |
| **14.4 Packing group** | III | III | III |
| **14.5 Environmental hazards** | Environmentally Hazardous | Not applicable | Marine Pollutant |
| **14.6 Special precautions for user** | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. |
| **14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code** | No data available. | No data available. | No data available. |
| **Control Temperature** | No data available. | No data available. | No data available. |
| **Emergency Temperature** | No data available. | No data available. | No data available. |
| **ADR Classification Code** | M6 | Not applicable. | Not applicable. |
| **IMDG Segregation Code** | Not applicable. | Not applicable. | NONE |

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

## SECTION 15: Regulatory information

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

**Carcinogenicity**

| Ingredient | CAS Nbr | Classification | Regulation |
|---|---|---|---|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 | Gr. 3: Not classifiable | International Agency for Research on Cancer |
| formaldehyde | 50-00-0 | Carc. 1B | The retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain, UK Mandatory Classification and Labelling list |
| formaldehyde | 50-00-0 | Grp. 1: Carcinogenic to humans | International Agency for Research on Cancer |
| lead powder; [particle diameter < 1 mm] | 7439-92-1 | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |

**Restrictions on the manufacture, placing on the market and use:**
The following substance(s) contained in this product is/are subject to Annex XVII of regulation (EC) 1907/2006, as amended for GB, with regard to restrictions on the manufacture, placing on the market and use when present in certain dangerous conditions. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

| Ingredient | CAS Nbr |
|---|---|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 1675-54-3 |

Restriction status: listed in UK REACH Annex XVII
Restricted uses: See Annex XVII to Regulation (EC) No 1907/2006 as amended for Great Britain for Conditions of Restriction

**Authorisation status under UK REACH:**
The following substance/s contained in this product might be or is/are subject to authorisation in accordance with UK REACH:

| Ingredient | CAS Nbr |
|---|---|
| lead powder; [particle diameter < 1 mm] | 7439-92-1 |

Authorisation status: listed in the UK REACH Candidate List of Substances of Very High Concern for Authorisation

**Regulation UK regulation 2023/63 (marketing and use of explosive precursors and poisons)**

This product contains a reportable substance according to UK legislation 1972/66: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. Please see UK Regulation 2023/63 for further details.

**Global inventory status**
Contact 3M for more information. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

**COMAH Regulation, SI 2015/483**
Seveso hazard categories, Annex 1, Part 1

| Hazard Categories | Qualifying quantity (tonnes) for the application of | |
|---|---|---|
| | Lower-tier requirements | Upper-tier requirements |
| E2 Hazardous to the Aquatic environment | 200 | 500 |

Seveso named dangerous substances, Annex 1, Part 2

| Dangerous Substances | Identifier(s) | Qualifying quantity (tonnes) for the application of | |
|---|---|---|---|
| | | Lower-tier requirements | Upper-tier requirements |
| formaldehyde | 50-00-0 | 5 | 50 |

**Regulation (EU) No 649/2012, as amended for GB**

| Chemical | Identifier(s) | Annex I |
|---|---|---|
| lead powder; [particle diameter < 1 mm] | 7439-92-1 | Part 1 |

**15.2. Chemical Safety Assessment**
A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended for GB.

## SECTION 16: Other information

**List of relevant H statements**

| | |
|---|---|
| EUH071 | Corrosive to the respiratory tract. |
| H302 | Harmful if swallowed. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H341 | Suspected of causing genetic defects. |
| H350 | May cause cancer. |
| H360FD | May damage fertility. May damage the unborn child. |
| H362 | May cause harm to breast-fed children. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| 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. |

**Revision information:**
Section 14 Hazardous/Not Hazardous for Transportation information was deleted.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being

provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

**3M SDSs for Great Britain are available at www.3M.com/uk**
For Northern Ireland documents, please contact your 3M representative to obtain a copy.

# Safety Data Sheet



| | | | |
|---|---|---|---|
| **Document group:** | 44-4845-2 | **Version number:** | 1.00 |
| **Revision date:** | 23/02/2024 | **Supersedes date:** | Initial issue. |

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006), as amended for GB.

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

**1.1. Product identifier**
Aerospace Sealant AC-730 B-1/2 Catalyst

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

**Identified uses**
Sealant.

**1.3. Details of the supplier of the safety data sheet**

**Address:** 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.
**Telephone:** +44 (0)1344 858 000
**E Mail:** tox.uk@mmm.com
**Website:** www.3M.com/uk

**1.4. Emergency telephone number**
+44 (0)1344 858 000

## SECTION 2: Hazard identification

**2.1. Classification of the substance or mixture**
**The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain**

The health and environmental classifications of this material have been derived using the calculation method, except in cases where test data are available or the physical form impacts classification. Classification(s) based on test data or physical form are noted below, if applicable.

**CLASSIFICATION:**
Acute Toxicity, Category 4 - Acute Tox. 4; H302
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318
Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373

For full text of H phrases, see Section 16.

**2.2. Label elements**
**The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain**

**SIGNAL WORD**
DANGER.

**Symbols**
GHS05 (Corrosion) |GHS07 (Exclamation mark) |GHS08 (Health Hazard) |

**Pictograms**

| Ingredient | CAS Nbr | EC No. | % by Wt |
|---|---|---|---|
| manganese dioxide | 1313-13-9 | 215-202-6 | 15 - 60 |
| Disodium oxide | 1313-59-3 | 215-208-9 | < 3 |
| Dipotassium oxide | 12136-45-7 | 235-227-6 | < 2 |

**HAZARD STATEMENTS:**

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H373 | May cause damage to organs through prolonged or repeated exposure: nervous system. |

**PRECAUTIONARY STATEMENTS**

**Prevention:**

| | |
|---|---|
| P260A | Do not breathe vapours. |
| P280A | Wear eye/face protection. |

**Response:**

| | |
|---|---|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTRE or doctor/physician. |

**For containers not exceeding 125 ml the following Hazard and Precautionary statements may be used:**

**<=125 ml Hazard statements**

| | |
|---|---|
| H318 | Causes serious eye damage. |

**<=125 ml Precautionary statements**

**Prevention:**

| | |
|---|---|
| P280A | Wear eye/face protection. |

**Response:**

| | |
|---|---|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTRE or doctor/physician. |

2% of the mixture consists of components of unknown acute oral toxicity.

Contains 1% of components with unknown hazards to the aquatic environment.

### 2.3. Other hazards

None known.
This material does not contain any substances that are assessed to be a PBT or vPvB

## SECTION 3: Composition/information on ingredients

### 3.1. Substances
Not applicable

### 3.2. Mixtures

| Ingredient | Identifier(s) | % | Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB |
|---|---|---|---|
| manganese dioxide | (CAS-No.) 1313-13-9<br>(EC-No.) 215-202-6 | 15 - 60 | Acute Tox. 4, H332<br>Acute Tox. 4, H302<br>EUH031<br>STOT RE 2, H373 |
| Oxydiethylene dibenzoate | (CAS-No.) 120-55-8<br>(EC-No.) 204-407-6 | 15 - 50 | Substance not classified as hazardous |
| Oxydipropyl dibenzoate | (CAS-No.) 27138-31-4<br>(EC-No.) 248-258-5 | < 20 | Aquatic Chronic 3, H412 |
| Zeolites | (CAS-No.) 1318-02-1<br>(EC-No.) 215-283-8 | 1 - 10 | Substance with a national occupational exposure limit |
| Aluminium Oxide (non-fibrous) | (CAS-No.) 1344-28-1<br>(EC-No.) 215-691-6 | < 5 | Substance with a national occupational exposure limit |
| Heterocyclic Organic Compound | Trade Secret | < 5 | Substance not classified as hazardous |
| Silicon dioxide | (CAS-No.) 7631-86-9<br>(EC-No.) 231-545-4 | < 5 | Substance with a national occupational exposure limit |
| Disodium oxide | (CAS-No.) 1313-59-3<br>(EC-No.) 215-208-9 | < 3 | EUH014<br>Acute Tox. 3, H301<br>Skin Corr. 1B, H314<br>STOT SE 3, H335 |
| Natural Amorphous compounds | None | < 2 | Substance not classified as hazardous |
| Dipotassium oxide | (CAS-No.) 12136-45-7<br>(EC-No.) 235-227-6 | < 2 | EUH014<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>STOT SE 3, H335 |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | (CAS-No.) 68909-20-6<br>(EC-No.) 272-697-1 | < 2 | EUH066<br>STOT RE 2, H373 |

Please see section 16 for the full text of any H statements referred to in this section

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

## SECTION 4: First aid measures

**4.1. Description of first aid measures**

**Inhalation**
Remove person to fresh air. If you feel unwell, get medical attention.

**Skin contact**
Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

**Eye contact**
Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

**If swallowed**
Rinse mouth. If you feel unwell, get medical attention.

**4.2. Most important symptoms and effects, both acute and delayed**
The most important symptoms and effects based on the GB CLP classification include:
Irritation to the skin (localized redness, swelling, itching, and dryness). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision). Harmful if swallowed. Target organ effects. See Section 11 for additional details.

**4.3. Indication of any immediate medical attention and special treatment required**
Not applicable

## SECTION 5: Fire-fighting measures

**5.1. Extinguishing media**
In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

**5.2. Special hazards arising from the substance or mixture**
None inherent in this product.

**Hazardous Decomposition or By-Products**

| Substance | Condition |
|---|---|
| Carbon monoxide | During combustion. |
| Carbon dioxide. | During combustion. |
| Oxides of nitrogen. | During combustion. |
| Oxides of sulphur. | During combustion. |

**5.3. Advice for fire-fighters**
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**
Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation

to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

**6.2. Environmental precautions**
Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

**6.3. Methods and material for containment and cleaning up**
Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

**6.4. Reference to other sections**
Refer to Section 8 and Section 13 for more information

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**
Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment.

**7.2. Conditions for safe storage including any incompatibilities**
Store away from heat. Store away from acids.

**7.3. Specific end use(s)**
See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

## SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**

**Occupational exposure limits**
If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

| Ingredient | CAS Nbr | Agency | Limit type | Additional comments |
|---|---|---|---|---|
| Manganese, inorganic compounds | 1313-13-9 | UK HSC | TWA(as Mn, respirable fraction):0.05 mg/m3;TWA(as Mn):0.5 mg/m3 | |
| Aluminium oxides | 1318-02-1 | UK HSC | TWA(as respirable dust):4 mg/m3;TWA(as inhalable dust):10 mg/m3 | |
| Aluminium Oxide (non-fibrous) | 1344-28-1 | UK HSC | TWA(as respirable dust):4 mg/m3;TWA(as inhalable dust):10 mg/m3 | |
| Silicon dioxide | 68909-20-6 | UK HSC | TWA(as respirable dust):2.4 mg/m3;TWA(as inhalable dust):6 mg/m3 | |
| DUST, INERT OR NUISANCE | 7631-86-9 | UK HSC | TWA(as respirable dust):4 mg/m3;TWA(as inhalable dust):10 mg/m3 | |

UK HSC : UK Health and Safety Commission

TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

**Biological limit values**
No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

**8.2. Exposure controls**

**8.2.1. Engineering controls**
Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

**8.2.2. Personal protective equipment (PPE)**

**Eye/face protection**

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:
Full face shield.
Indirect vented goggles.

*Applicable Norms/Standards*
Use eye/face protection conforming to EN 166

**Skin/hand protection**
Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.
Gloves made from the following material(s) are recommended:

| Material | Thickness (mm) | Breakthrough Time |
|---|---|---|
| Polymer laminate | No data available | No data available |

*Applicable Norms/Standards*
Use gloves tested to EN 374

**Respiratory protection**

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:
Half facepiece or full facepiece air-purifying respirator suitable for particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

*Applicable Norms/Standards*
Use a respirator conforming to EN 140 or EN 136: filter types A & P

## SECTION 9: Physical and chemical properties

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

| | |
|---|---|
| **Physical state** | Liquid. |
| **Colour** | Dark Brown |

| | |
|---|---|
| **Odor** | Slight Odor |
| **Odour threshold** | *No data available.* |
| **Melting point/freezing point** | *Not applicable.* |
| **Boiling point/boiling range** | *No data available.* |
| **Flammability (solid, gas)** | Not applicable. |
| **Flammable Limits(LEL)** | *No data available.* |
| **Flammable Limits(UEL)** | *No data available.* |
| **Flash point** | >=93.3 ºC [*Test Method:*Closed Cup] |
| **Autoignition temperature** | *No data available.* |
| **Decomposition temperature** | *No data available.* |
| **pH** | *substance/mixture is non-soluble (in water)* |
| **Kinematic Viscosity** | *No data available.* |
| **Water solubility** | Nil |
| **Solubility- non-water** | *No data available.* |
| **Partition coefficient: n-octanol/water** | *No data available.* |
| **Vapour pressure** | *No data available.* |
| **Density** | 1.58 g/ml |
| **Relative density** | 1.58 [*Ref Std:*WATER=1] |
| **Relative Vapour Density** | >=1 [*Ref Std:*AIR=1] |
| **Particle Characteristics** | *Not applicable.* |

**9.2. Other information**

**9.2.2 Other safety characteristics**

| | |
|---|---|
| **EU Volatile Organic Compounds** | *No data available.* |
| **Evaporation rate** | *Not applicable.* |
| **Molecular weight** | *No data available.* |
| **Percent volatile** | 0.6 % weight |

## SECTION 10: Stability and reactivity

**10.1 Reactivity**
This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

**10.2 Chemical stability**
Stable.

**10.3 Possibility of hazardous reactions**
Hazardous polymerisation will not occur.

**10.4 Conditions to avoid**
Heat.

**10.5 Incompatible materials**
Reducing agents.
Strong acids.

**10.6 Hazardous decomposition products**

| **Substance** | **Condition** |
|---|---|
| None known. | |

Refer to section 5.2 for hazardous decomposition products during combustion.

# SECTION 11: Toxicological information

**The information below may not agree with the material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.**

**11.1. Information on hazard classes as defined in the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.**

**Signs and Symptoms of Exposure**

**Based on test data and/or information on the components, this material may produce the following health effects:**

**Inhalation**
Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

**Skin contact**
May be harmful in contact with skin. Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, dryness, cracking, blistering, and pain.

**Eye contact**
Corrosive (eye burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

**Ingestion**
Harmful if swallowed.
Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

**Additional Health Effects:**

**Prolonged or repeated exposure may cause target organ effects:**
Neurological effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate. Respiratory effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish coloured skin (cyanosis), sputum production, changes in lung function tests, and respiratory failure.

**Toxicological Data**
If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity**

| Name | Route | Species | Value |
|---|---|---|---|
| Overall product | Dermal | | No data available; calculated ATE >2,000 - =5,000 mg/kg |
| Overall product | Ingestion | | No data available; calculated ATE >300 - =2,000 mg/kg |
| manganese dioxide | Dermal | Rat | LD50 2,000 mg/kg |
| manganese dioxide | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 1.5 mg/l |
| manganese dioxide | Ingestion | Rat | LD50 > 2,197 mg/kg |
| Oxydipropyl dibenzoate | Dermal | Rat | LD50 > 2,000 mg/kg |
| Oxydipropyl dibenzoate | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 200 mg/l |

| | | | |
|---|---|---|---|
| Oxydipropyl dibenzoate | Ingestion | Rat | LD50 3,295 mg/kg |
| Zeolites | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| Zeolites | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 4.57 mg/l |
| Zeolites | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Heterocyclic Organic Compound | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Silicon dioxide | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Silicon dioxide | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 0.691 mg/l |
| Silicon dioxide | Ingestion | Rat | LD50 > 5,110 mg/kg |
| Aluminium Oxide (non-fibrous) | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Aluminium Oxide (non-fibrous) | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 2.3 mg/l |
| Aluminium Oxide (non-fibrous) | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Disodium oxide | Ingestion | Professional judgement | LD50 estimated to be 50 - 300 mg/kg |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Ingestion | Rat | LD50 > 2,000 mg/kg |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Dermal | similar health hazards | LD50 estimated to be > 5,000 mg/kg |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

| Name | Species | Value |
|---|---|---|
| manganese dioxide | Rabbit | No significant irritation |
| Oxydipropyl dibenzoate | Rabbit | No significant irritation |
| Zeolites | Rabbit | No significant irritation |
| Silicon dioxide | Rabbit | No significant irritation |
| Aluminium Oxide (non-fibrous) | Rabbit | No significant irritation |
| Disodium oxide | similar compounds | Corrosive |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Rabbit | No significant irritation |
| Dipotassium oxide | official classification | Corrosive |

**Serious Eye Damage/Irritation**

| Name | Species | Value |
|---|---|---|
| manganese dioxide | Rabbit | Mild irritant |
| Oxydipropyl dibenzoate | Rabbit | No significant irritation |
| Zeolites | Rabbit | Mild irritant |
| Silicon dioxide | Rabbit | No significant irritation |
| Aluminium Oxide (non-fibrous) | Rabbit | No significant irritation |
| Disodium oxide | similar compounds | Corrosive |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Rabbit | No significant irritation |
| Dipotassium oxide | similar health hazards | Corrosive |

**Skin Sensitisation**

| Name | Species | Value |
|---|---|---|

| | | |
|---|---|---|
| manganese dioxide | Mouse | Not classified |
| Oxydipropyl dibenzoate | Guinea pig | Not classified |
| Silicon dioxide | Human and animal | Not classified |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Guinea pig | Not classified |

**Respiratory Sensitisation**

For the component/components, either no data is currently available or the data is not sufficient for classification.

**Germ Cell Mutagenicity**

| Name | Route | Value |
|---|---|---|
| manganese dioxide | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| manganese dioxide | In vivo | Some positive data exist, but the data are not sufficient for classification |
| Oxydipropyl dibenzoate | In Vitro | Not mutagenic |
| Heterocyclic Organic Compound | In Vitro | Not mutagenic |
| Silicon dioxide | In Vitro | Not mutagenic |
| Aluminium Oxide (non-fibrous) | In Vitro | Not mutagenic |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | In Vitro | Not mutagenic |

**Carcinogenicity**

| Name | Route | Species | Value |
|---|---|---|---|
| Silicon dioxide | Not specified. | Mouse | Some positive data exist, but the data are not sufficient for classification |
| Aluminium Oxide (non-fibrous) | Inhalation | Rat | Not carcinogenic |

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

| Name | Route | Value | Species | Test result | Exposure Duration |
|---|---|---|---|---|---|
| manganese dioxide | Inhalation | Not classified for female reproduction | Rat | NOAEL 20 mg/m³ | 2 generation |
| manganese dioxide | Inhalation | Not classified for male reproduction | Rabbit | LOAEL 250 mg/kg | 1 days |
| manganese dioxide | Ingestion | Not classified for development | Rat | LOAEL 354 mg/kg/day | premating into lactation |
| manganese dioxide | Inhalation | Not classified for development | Rat | LOAEL 61 mg/m³ | gestation into lactation |
| Oxydipropyl dibenzoate | Ingestion | Not classified for female reproduction | Rat | NOAEL 500 mg/kg/day | 2 generation |
| Oxydipropyl dibenzoate | Ingestion | Not classified for male reproduction | Rat | NOAEL 400 mg/kg/day | 2 generation |
| Oxydipropyl dibenzoate | Ingestion | Not classified for development | Rat | NOAEL 1,000 mg/kg/day | during gestation |
| Silicon dioxide | Ingestion | Not classified for female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Silicon dioxide | Ingestion | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| Silicon dioxide | Ingestion | Not classified for development | Rat | NOAEL 1,350 mg/kg/day | during organogenesis |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Ingestion | Not classified for female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Ingestion | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|---|---|---|---|---|---|---|
| Disodium oxide | Inhalation | respiratory irritation | May cause respiratory irritation | Professional judgement | NOAEL Not available | |
| Dipotassium oxide | Inhalation | respiratory irritation | May cause respiratory irritation | similar health hazards | NOAEL Not available | |

**Specific Target Organ Toxicity - repeated exposure**

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|---|---|---|---|---|---|---|
| manganese dioxide | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Monkey | LOAEL 1.1 mg/m³ | 10 months |
| manganese dioxide | Inhalation | nervous system | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | occupational exposure |
| Oxydipropyl dibenzoate | Ingestion | hematopoietic system \| liver | Not classified | Rat | NOAEL 2,500 mg/kg/day | 90 days |
| Silicon dioxide | Inhalation | respiratory system \| silicosis | Not classified | Human | NOAEL Not available | occupational exposure |
| Aluminium Oxide (non-fibrous) | Inhalation | pneumoconiosis | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | occupational exposure |
| Aluminium Oxide (non-fibrous) | Inhalation | pulmonary fibrosis | Not classified | Human | NOAEL Not available | occupational exposure |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Inhalation | respiratory system | May cause damage to organs though prolonged or repeated exposure | Rat | LOAEL 0.035 mg/l | 13 weeks |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Inhalation | hematopoietic system \| kidney and/or bladder | Not classified | Rat | NOAEL 0.035 mg/l | 13 weeks |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | Ingestion | liver | Not classified | Rat | NOAEL 1,000 mg/kg/day | 5 weeks |

**Aspiration Hazard**
For the component/components, either no data is currently available or the data is not sufficient for classification.

**Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.**

**11.2. Information on other hazards**

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

## SECTION 12: Ecological information

**The information below may not agree with the material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.**

### 12.1. Toxicity

No product test data available.

| Material | CAS # | Organism | Type | Exposure | Test endpoint | Test result |
|---|---|---|---|---|---|---|
| manganese dioxide | 1313-13-9 | Rainbow trout | Endpoint not reached | 96 hours | LC50 | >100 mg/l |
| manganese dioxide | 1313-13-9 | Green algae | Experimental | 72 hours | EC50 | >100 mg/l |
| manganese dioxide | 1313-13-9 | Water flea | Experimental | 48 hours | EC50 | >100 mg/l |
| manganese dioxide | 1313-13-9 | Green algae | Experimental | 72 hours | EC10 | 100 mg/l |
| manganese dioxide | 1313-13-9 | Water flea | Experimental | 8 days | NOEC | 100 mg/l |
| Oxydiethylene dibenzoate | 120-55-8 | Green algae | Experimental | 72 hours | EL50 | 11 mg/l |
| Oxydiethylene dibenzoate | 120-55-8 | Rainbow trout | Experimental | 96 hours | LL50 | 2.9 mg/l |
| Oxydiethylene dibenzoate | 120-55-8 | Water flea | Experimental | 48 hours | EL50 | 6.7 mg/l |
| Oxydiethylene dibenzoate | 120-55-8 | Green algae | Experimental | 72 hours | NOEL | 2.2 mg/l |
| Oxydiethylene dibenzoate | 120-55-8 | Activated sludge | Experimental | 3 hours | EC50 | >100 mg/l |
| Oxydiethylene dibenzoate | 120-55-8 | Redworm | Experimental | 14 days | LC50 | >1,000 mg/kg (Dry Weight) |
| Oxydipropyl dibenzoate | 27138-31-4 | Fathead minnow | Experimental | 96 hours | LC50 | 3.7 mg/l |
| Oxydipropyl dibenzoate | 27138-31-4 | Green algae | Experimental | 72 hours | EL50 | 4.9 mg/l |
| Oxydipropyl dibenzoate | 27138-31-4 | Water flea | Experimental | 48 hours | EL50 | 19.31 mg/l |
| Oxydipropyl dibenzoate | 27138-31-4 | Green algae | Experimental | 72 hours | EC10 | 0.89 mg/l |
| Zeolites | 1318-02-1 | African clawed frog | Analogous Compound | 96 hours | LC50 | 1,800 mg/l |
| Zeolites | 1318-02-1 | Fathead minnow | Analogous Compound | 96 hours | LC50 | >680 mg/l |
| Zeolites | 1318-02-1 | Green algae | Analogous Compound | 72 hours | EC50 | 130 mg/l |
| Zeolites | 1318-02-1 | Sediment organism | Analogous Compound | 22 days | EC50 | 364.9 mg/l |
| Zeolites | 1318-02-1 | Water flea | Analogous Compound | 48 hours | EC50 | >100 mg/l |
| Zeolites | 1318-02-1 | Fathead minnow | Analogous Compound | 30 days | NOEC | 86.7 mg/l |
| Zeolites | 1318-02-1 | Green algae | Analogous Compound | 72 hours | NOEC | 18 mg/l |
| Zeolites | 1318-02-1 | Water flea | Analogous Compound | 21 days | NOEC | 32 mg/l |
| Zeolites | 1318-02-1 | Bacteria | Experimental | 16 hours | EC50 | 950 mg/l |
| Zeolites | 1318-02-1 | Radish | Experimental | 23 days | EC50 | 4,000 mg/kg (Dry Weight) |
| Aluminium Oxide (non-fibrous) | 1344-28-1 | N/A | Experimental | 96 hours | LC50 | >100 mg/l |
| Aluminium Oxide (non-fibrous) | 1344-28-1 | Green algae | Experimental | 72 hours | EC50 | >100 mg/l |
| Aluminium Oxide (non-fibrous) | 1344-28-1 | Water flea | Experimental | 48 hours | LC50 | >100 mg/l |
| Aluminium Oxide (non-fibrous) | 1344-28-1 | Green algae | Experimental | 72 hours | NOEC | >100 mg/l |
| Heterocyclic Organic Compound | Trade Secret | Green algae | Experimental | 72 hours | EC50 | >100 mg/l |

| | | | | | | |
|---|---|---|---|---|---|---|
| Heterocyclic Organic Compound | Trade Secret | Green algae | Experimental | 72 hours | NOEC | 100 mg/l |
| Silicon dioxide | 7631-86-9 | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| Disodium oxide | 1313-59-3 | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| Dipotassium oxide | 12136-45-7 | Water flea | Estimated | 48 hours | EC50 | 112 mg/l |
| Dipotassium oxide | 12136-45-7 | Fish | Experimental | 96 hours | LC50 | 917.6 mg/l |
| Dipotassium oxide | 12136-45-7 | Water flea | Estimated | 21 days | NOEC | 68 mg/l |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | 68909-20-6 | Algae or other aquatic plants | Estimated | 72 hours | EC50 | >100 mg/l |

### 12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|---|---|---|---|---|---|---|
| manganese dioxide | 1313-13-9 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| Oxydiethylene dibenzoate | 120-55-8 | Experimental Biodegradation | 28 days | CO2 evolution | 93 %CO2 evolution/THCO2 evolution | OECD 301B - Modified sturm or CO2 |
| Oxydipropyl dibenzoate | 27138-31-4 | Experimental Biodegradation | 28 days | CO2 evolution | 85 %CO2 evolution/THCO2 evolution | OECD 301B - Modified sturm or CO2 |
| Zeolites | 1318-02-1 | Analogous Compound Hydrolysis | | Hydrolytic half-life | 60 days (t 1/2) | |
| Aluminium Oxide (non-fibrous) | 1344-28-1 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| Heterocyclic Organic Compound | Trade Secret | Experimental Biodegradation | 28 days | BOD | 0 %BOD/ThOD | OECD 301F - Manometric respirometry |
| Silicon dioxide | 7631-86-9 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| Disodium oxide | 1313-59-3 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| Dipotassium oxide | 12136-45-7 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | 68909-20-6 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |

### 12.3 : Bioaccumulative potential

| Material | Cas No. | Test type | Duration | Study Type | Test result | Protocol |
|---|---|---|---|---|---|---|
| manganese dioxide | 1313-13-9 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Oxydiethylene dibenzoate | 120-55-8 | Experimental Bioconcentration | | Log Kow | 3.2 | |
| Oxydipropyl dibenzoate | 27138-31-4 | Modeled Bioconcentration | | Bioaccumulation factor | 8 | Catalogic™ |
| Zeolites | 1318-02-1 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Aluminium Oxide (non-fibrous) | 1344-28-1 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |

| | | | | | | |
|---|---|---|---|---|---|---|
| Heterocyclic Organic Compound | Trade Secret | Estimated Bioconcentration | | Bioaccumulation factor | 2.8 | |
| Silicon dioxide | 7631-86-9 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Disodium oxide | 1313-59-3 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Dipotassium oxide | 12136-45-7 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | 68909-20-6 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |

### 12.4. Mobility in soil

| Material | Cas No. | Test type | Study Type | Test result | Protocol |
|---|---|---|---|---|---|
| Oxydiethylene dibenzoate | 120-55-8 | Experimental Mobility in Soil | Koc | 1,500 l/kg | OECD 121 Estim. of Koc by HPLC |
| Heterocyclic Organic Compound | Trade Secret | Modeled Mobility in Soil | Koc | 37,000 l/kg | Episuite™ |

### 12.5. Results of the PBT and vPvB assessment

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

### 12.6. Other adverse effects

This material does not contain any substances that are assessed to be an endocrine disruptor for environmental effects

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

**EU waste code (product as sold)**

08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances

## SECTION 14: Transportation information

Not hazardous for transportation.

| | Ground Transport (ADR) | Air Transport (IATA) | Marine Transport (IMDG) |
|---|---|---|---|
| **14.1 UN number** | No data available. | No data available. | No data available. |
| **14.2 UN proper shipping name** | No data available. | No data available. | No data available. |
| **14.3 Transport hazard class(es)** | No data available. | No data available. | No data available. |
| **14.4 Packing group** | No data available. | No data available. | No data available. |
| **14.5 Environmental hazards** | No data available. | No data available. | No data available. |
| **14.6 Special precautions for user** | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. |
| **14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code** | No data available. | No data available. | No data available. |
| **Control Temperature** | No data available. | No data available. | No data available. |
| **Emergency Temperature** | No data available. | No data available. | No data available. |
| **ADR Classification Code** | No data available. | No data available. | No data available. |
| **IMDG Segregation Code** | No data available. | No data available. | No data available. |

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

## SECTION 15: Regulatory information

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

**Carcinogenicity**

| Ingredient | CAS Nbr | Classification | Regulation |
|---|---|---|---|
| Silicon dioxide | 7631-86-9 | Gr. 3: Not classifiable | International Agency for Research on Cancer |
| Zeolites | 1318-02-1 | Gr. 3: Not classifiable | International Agency for Research on Cancer |

**Global inventory status**

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The

components of this product are in compliance with the new substance notification requirements of CEPA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

**COMAH Regulation, SI 2015/483**
Seveso hazard categories, Annex 1, Part 1
None

Seveso named dangerous substances, Annex 1, Part 2
None

**Regulation (EU) No 649/2012, as amended for GB**
No chemicals listed

**15.2. Chemical Safety Assessment**
A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended for GB.

## SECTION 16: Other information

**List of relevant H statements**

| | |
|---|---|
| EUH014 | Reacts violently with water. |
| EUH031 | Contact with acid liberates toxic gas. |
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H373 | May cause damage to organs through prolonged or repeated exposure: nervous system. |
| H412 | Harmful to aquatic life with long lasting effects. |

**Revision information:**
No revision information

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

**3M SDSs for Great Britain are available at www.3M.com/uk**
For Northern Ireland documents, please contact your 3M representative to obtain a copy.