

# Safety Data Sheet

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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 Kit AC-735 B-2

#### **Product Identification Numbers**

75-0002-0517-1

7100307614

#### 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

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:

30-3363-6, 43-9280-9

# 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:**

Titanium dioxide; bis-[4-(2,3-epoxipropoxi)phenyl]propane; Calcium carbonate; Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2- chloroethane] and sodium sulfide (Na2(Sx)), reduced; trizinc bis(orthophosphate); Formaldehyde, oligomeric reaction products with phenol

#### **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.

# SUPPLEMENTAL INFORMATION:

**Supplemental Hazard Statements:** 

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or

mist

.

EUH208 Contains Formaldehyde, oligomeric reaction products with phenol. | bis-[4-(2,3-

epoxipropoxi)phenyl]propane.May produce an allergic reaction.

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

# **Revision information:**

GB Label: CLP Ingredients - kit components information was modified.



# Safety Data Sheet

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 30-3363-6
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 19/04/2023

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-735 B-1/2 and B-2 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:** 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.

The carcinogenicity classification for titanium dioxide is not applicable based on physical form (material is not a powder).

#### **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**



Ingredient	CAS Nbr	EC No.	% by Wt
Propane, 1,2,3-trichloro-, polymer with 1,1'- [methylenebis(oxy)]bis[2- chloroethane] and sodium sulfide (Na2(Sx)), reduced	68611-50-7		70 - 80
Calcium carbonate	471-34-1	207-439-9	10 - 20
bis-[4-(2,3-epoxipropoxi)phenyl]propane	1675-54-3	216-823-5	< 1
Formaldehyde, oligomeric reaction products with phenol	9003-35-4	500-005-2	< 1
Titanium dioxide	13463-67-7	236-675-5	<= 1
trizinc bis(orthophosphate)	7779-90-0	231-944-3	< 1

#### **HAZARD STATEMENTS:**

H411 Toxic to aquatic life with long lasting effects.

# 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:**

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe

spray or mist.

EUH208 Contains Formaldehyde, oligomeric reaction products with phenol. | bis-[4-(2,3-

epoxipropoxi)phenyl]propane. May produce an allergic reaction.

Contains 75% 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	70 - 80	Substance not classified as hazardous
Calcium carbonate	(CAS-No.) 471-34-1 (EC-No.) 207-439-9	10 - 20	Substance with a national occupational exposure limit
Formaldehyde, oligomeric reaction products with phenol	(CAS-No.) 9003-35-4 (EC-No.) 500-005-2	< 1	Skin Sens. 1, H317
bis-[4-(2,3-epoxipropoxi)phenyl]propane	(CAS-No.) 1675-54-3 (EC-No.) 216-823-5	< 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
trizinc bis(orthophosphate)	(CAS-No.) 7779-90-0 (EC-No.) 231-944-3	< 1	Aquatic Acute 1, H400,M=10 Aquatic Chronic 1, H410,M=10
Titanium dioxide	(CAS-No.) 13463-67-7 (EC-No.) 236-675-5	<= 1	Carc. 2, H351 (inhalation)

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
	[`	(C >= 5%) Skin Irrit. 2, H315 (C >= 5%) Eye Irrit. 2, H319

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**

SubstanceConditionformaldehydeDuring combustion.Carbon monoxideDuring combustion.Carbon dioxide.During combustion.Hydrogen ChlorideDuring 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

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	<b>Additional comments</b>
Titanium dioxide	13463-67-7	UK HSC	TWA(respirable):4 mg/m3;TWA(Inhalable):10 mg/m3	
DUST, INERT OR NUISANCE	471-34-1	UK HSC	TWA(as respirable dust):4 mg/m3;TWA(as inhalable dust):10 mg/m3	
Limestone	471-34-1	UK HSC	TWA(respirable):4 mg/m3;TWA(as respirable dust):4 mg/m3;TWA(Inhalable):10 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

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:

MaterialThickness (mm)Breakthrough TimePolymer laminateNo data availableNo data available

Applicable Norms/Standards
Use gloves tested to EN 374

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

#### 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 stateLiquid.Specific Physical Form:PasteColourWhiteOdorSulfuric

Odour thresholdNo data available.Melting point/freezing pointNot applicable.Boiling point/boiling rangeNot applicable.Flammability (solid, gas)Not applicable.Flammable Limits(LEL)No data available.Flammable Limits(UEL)No data available.

Flash point >=93.3 °C [Test Method:Closed Cup]

Autoignition temperature

No data available.

No data available.

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-waterNo data available.Partition coefficient: n-octanol/waterNo data available.Vapour pressureNo data available.

**Density** 1.1 g/ml

Relative density

1.1 [Ref Std: WATER=1]

**Relative Vapour Density**No data available.

#### 9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic CompoundsNo data available.Evaporation rateNo data available.Molecular weightNot 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

Strong bases.

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.

#### Skin contact

Contact with the skin during product use is not expected to result in significant irritation. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

#### **Eve 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
Titanium dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium dioxide	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
trizinc bis(orthophosphate)	Dermal		LD50 estimated to be > 5,000 mg/kg
trizinc bis(orthophosphate)	Ingestion	Rat	LD50 > 5,000 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, 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

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
Titanium dioxide	Rabbit	No significant irritation
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Rabbit	Mild irritant
Formaldehyde, oligomeric reaction products with phenol	Human	Mild irritant
	and	
	animal	

**Serious Eye Damage/Irritation** 

Name	Species	Value
Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-	Rabbit	No significant irritation
chloroethane] and sodium sulfide (Na2(Sx)), reduced		
Calcium carbonate	Rabbit	No significant irritation
Titanium dioxide	Rabbit	No significant irritation
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Rabbit	Moderate irritant
Formaldehyde, oligomeric reaction products with phenol	Human	Moderate irritant
	and	
	animal	

# **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
Titanium dioxide	Human	Not classified
	and	
	animal	
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Human	Sensitising
	and	
	animal	

# 3M Aerospace Sealant AC-735 B-1/2 and B-2 Base

Formaldehyde, oligomeric reaction products with phenol	Human	Sensitising
	and	
	animal	

**Respiratory Sensitisation** 

Name	Species	Value
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Human	Not classified
Formaldehyde, oligomeric reaction products with phenol	Human	Not classified

**Germ Cell Mutagenicity** 

Name	Route	Value
Titanium dioxide	In Vitro	Not mutagenic
Titanium dioxide	In vivo	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

Carcinogenicity

Name	Route	Species	Value
Titanium dioxide	Ingestion	Multiple	Not carcinogenic
		animal	
		species	
Titanium dioxide	Inhalation	Rat	Carcinogenic.
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Dermal	Mouse	Some positive data exist, but the data are not
			sufficient for classification

# **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

# 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	

**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
Titanium dioxide	Inhalation	respiratory system	Some positive data exist, but the	Rat	LOAEL 0.01	2 years

			data are not sufficient for classification		mg/l	
Titanium dioxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
bis-[4-(2,3- epoxipropoxi)phenyl]prop ane	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
bis-[4-(2,3- epoxipropoxi)phenyl]prop ane	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
bis-[4-(2,3- epoxipropoxi)phenyl]prop ane	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, 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

#### **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		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
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Activated sludge	Analogous Compound	3 hours	IC50	>100 mg/l
bis-[4-(2,3- epoxipropoxi)phen	1675-54-3	Rainbow trout	Estimated	96 hours	LC50	2 mg/l

yl]propane						
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Water flea	Estimated	48 hours	EC50	1.8 mg/l
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Green algae	Experimental	72 hours	ErC50	>11 mg/l
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Green algae	Experimental	72 hours	NOEC	4.2 mg/l
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Water flea	Experimental	21 days	NOEC	0.3 mg/l
Formaldehyde, oligomeric reaction products with phenol	9003-35-4	N/A	Data not available or insufficient for classification	N/A	N/A	n/a
Titanium dioxide	13463-67-7	Activated sludge	Experimental	3 hours	NOEC	>=1,000 mg/l
Titanium dioxide	13463-67-7	Diatom	Experimental	72 hours	EC50	>10,000 mg/l
Titanium dioxide	13463-67-7	Fathead minnow	Experimental	96 hours	LC50	>100 mg/l
Titanium dioxide	13463-67-7	Water flea	Experimental	48 hours	EC50	>100 mg/l
Titanium dioxide	13463-67-7	Diatom	Experimental	72 hours	NOEC	5,600 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

# 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		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
bis-[4-(2,3-	1675-54-3	Experimental	28 days	BOD	5 %BOD/COD	OECD 301F - Manometric

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epoxipropoxi)phen yl]propane		Biodegradation				respirometry
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	117 hours (t 1/2)	OECD 111 Hydrolysis func of pH
Formaldehyde, oligomeric reaction products with phenol	9003-35-4	Estimated Biodegradation	28 days	BOD	3 %BOD/ThOD	
Titanium dioxide	13463-67-7	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

# 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		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
bis-[4-(2,3- epoxipropoxi)phen yl]propane	1675-54-3	Experimental Bioconcentration		Log Kow	3.242	OECD 117 log Kow HPLC method
Formaldehyde, oligomeric reaction products with phenol	9003-35-4	Estimated Bioconcentration		Bioaccumulation factor	2.57	
Titanium dioxide	13463-67-7	Experimental BCF - Fish	42 days	Bioaccumulation factor	9.6	

# 12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
bis-[4-(2,3- epoxipropoxi)pheny l]propane		Modeled Mobility in Soil	Koc	450 l/kg	Episuite <sup>™</sup>
Formaldehyde, oligomeric reaction products with phenol		Experimental Mobility in Soil	Koc	637 l/kg	OECD 121 Estim. of Koc by HPLC

# 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	Ш	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
Titanium dioxide	13463-67-7	Grp. 2B: Possible human carc.	for Research on Cancer 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.

bis-[4-(2,3-epoxipropoxi)phenyl]propane 1675-54-3

#### 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	200	500	
environment			

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
trizinc bis(orthophosphate)	7779-90-0	100	200

# 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.

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#### List of relevant H statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H351i	Suspected of causing cancer by inhalation.
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:**

GB Section 02: CLP Ingredient table information was added.

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

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**Document group:** 43-9280-9 Version number: 2.00

**Revision date:** 29/10/2024 **Supersedes date:** 20/03/2024

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-735 B-2 Catalyst

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

#### **Identified uses**

Curing Agent

#### 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**



#### **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.

1% of the mixture consists of components of unknown acute oral toxicity.

### 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 (EC-No.) 215-202-6	25 - 55	Acute Tox. 4, H332 Acute Tox. 4, H302 EUH031

			STOT RE 2, H373
Oxydiethylene dibenzoate	(CAS-No.) 120-55-8 (EC-No.) 204-407-6	20 - 50	Substance not classified as hazardous
Oxydipropyl dibenzoate	(CAS-No.) 27138-31-4 (EC-No.) 248-258-5	< 15	Aquatic Chronic 3, H412
Zeolites	(CAS-No.) 1318-02-1 (EC-No.) 215-283-8	1 - 10	Substance with a national occupational exposure limit
Silicon dioxide	(CAS-No.) 7631-86-9 (EC-No.) 231-545-4	< 3.5	Substance with a national occupational exposure limit
Disodium oxide	(CAS-No.) 1313-59-3 (EC-No.) 215-208-9	< 3	EUH014 Acute Tox. 3, H301 Skin Corr. 1B, H314 STOT SE 3, H335
Aluminium Oxide (non-fibrous)	(CAS-No.) 1344-28-1 (EC-No.) 215-691-6	< 3	Substance with a national occupational exposure limit
Dipotassium oxide	(CAS-No.) 12136-45-7 (EC-No.) 235-227-6	< 1.5	EUH014 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335
Heterocyclic Organic Compound	Trade Secret	< 1.5	Substance not classified as hazardous
Silanamine, 1,1,1-trimethyl-N- (trimethylsilyl)-, hydrolysis products with silica	(CAS-No.) 68909-20-6 (EC-No.) 272-697-1	< 1.5	EUH066 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

Carbon monoxide

Carbon dioxide.

Oxides of nitrogen.

Oxides of sulphur.

### **Condition**

During combustion.

During combustion.

During combustion.

During combustion.

# **5.3.** Advice for fire-fighters

No special protective actions for fire-fighters are anticipated.

# **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

No special storage requirements.

#### 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 HSE	TWA(as Mn, respirable	
			fraction):0.05 mg/m3	
Aluminium oxides	1318-02-1	UK HSE	TWA(as respirable dust):4	
			mg/m3;TWA(as inhalable	
			dust):10 mg/m3	
Aluminium Oxide (non-fibrous)	1344-28-1	UK HSE	TWA(as respirable dust):4	
			mg/m3;TWA(as inhalable	
			dust):10 mg/m3	
Silicon dioxide	68909-20-6	UK HSE	TWA(as respirable dust):2.4	
			mg/m3;TWA(as inhalable	
			dust):6 mg/m3	
DUST, INERT OR NUISANCE	7631-86-9	UK HSE	TWA(as respirable dust):4	
			mg/m3;TWA(as inhalable	
			dust):10 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

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:

MaterialThickness (mm)Breakthrough TimePolymer laminateNo data availableNo 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 type P

# **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

Information on basic physical and chemical prop	er des	
Physical state	Liquid.	
Colour	Black-Brown	
Odor	No data available.	
Odour threshold	No data available.	
Melting point/freezing point	Not applicable.	
Boiling point/boiling range	No data available.	
Flammability	Not applicable.	
Flammable Limits(LEL)	No data available.	
Flammable Limits(UEL)	No data available.	
Flash point	Flash point > 93 °C (200 °F)	
Autoignition temperature	No data available.	
Decomposition temperature	No data available.	
рН	10	
Kinematic Viscosity	Not applicable.	
Water solubility	Not applicable.	
Solubility- non-water	No data available.	
Partition coefficient: n-octanol/water	No data available.	
Vapour pressure	No data available.	
Density	1.6 kg/l	
Relative density	1.61	·
Relative Vapour Density	No data available.	·
Particle Characteristics	Not applicable.	

### 9.2. Other information

#### 9.2.2 Other safety characteristics

EU Volatile Organic Compounds

Evaporation rate

No data available.

No data available.

Percent volatile

0.2 %

# **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

Not determined

#### 10.5 Incompatible materials

Reducing agents.

#### 10.6 Hazardous decomposition products

Substance

None known.

Condition

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.

#### **Eve 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-	Rat	LC50 > 1.5 mg/l
	Dust/Mist		
	(4 hours)		
manganese dioxide	Ingestion	Rat	LD50 > 2,197 mg/kg
Oxydipropyl dibenzoate	Dermal	Rat	LD50 > 2,000 mg/kg
Oxydipropyl dibenzoate	Inhalation-	Rat	LC50 > 200 mg/l
	Dust/Mist		
	(4 hours)		
Oxydipropyl dibenzoate	Ingestion	Rat	LD50 3,295 mg/kg
Zeolites	Dermal	Rabbit	LD50 > 2,000 mg/kg
Zeolites	Inhalation-	Rat	LC50 > 4.57  mg/l
	Dust/Mist		
	(4 hours)		
Zeolites	Ingestion	Rat	LD50 > 5,000 mg/kg
Silicon dioxide	Dermal	Rabbit	LD50 > 5,000 mg/kg
Silicon dioxide	Inhalation-	Rat	LC50 > 0.691 mg/l
	Dust/Mist		
	(4 hours)		
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-	Rat	LC50 > 2.3 mg/l
,	Dust/Mist		
	(4 hours)		
Aluminium Oxide (non-fibrous)	Ingestion	Rat	LD50 > 5,000 mg/kg
Disodium oxide	Ingestion	Professio	LD50 estimated to be 50 - 300 mg/kg
		nal	
		judgeme	
		nt	
Heterocyclic Organic Compound	Ingestion	Rat	LD50 > 5,000 mg/kg
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis	Ingestion	Rat	LD50 > 2,000 mg/kg
products with silica		1	
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis	Dermal	similar	LD50 estimated to be > 5,000 mg/kg
products with silica		health	
		hazards	

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Simil Coll oslon/111tmtion		
Name	Species	Value
manganese dioxide	Rabbit	No significant irritation

# Aerospace Sealant AC-735 B-2 Catalyst

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	Corrosive
	compoun	
	ds	
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Rabbit	No significant irritation
Dipotassium oxide	official	Corrosive
	classificat	
	ion	

**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	Corrosive
	compoun	
	ds	
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Rabbit	No significant irritation
Dipotassium oxide	similar	Corrosive
	health	
	hazards	

# **Skin Sensitisation**

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

# **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
Silicon dioxide	In Vitro	Not mutagenic
Aluminium Oxide (non-fibrous)	In Vitro	Not mutagenic
Heterocyclic Organic Compound	In Vitro	Not mutagenic
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	In Vitro	Not mutagenic

Carcinogenicity

Carenogenery										
Name	Route	Species	Value							
Silicon dioxide	Not	Mouse	Some positive data exist, but the data are not							
	specified.		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	Professio nal judgeme nt	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-	Inhalation	respiratory system	May cause damage to organs	Rat	LOAEL	13 weeks

trimethyl-N- (trimethylsilyl)-, hydrolysis products with silica			though prolonged or repeated exposure		0.035 mg/l	
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)
Silicon dioxide	7631-86-9	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
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
Disodium oxide	1313-59-3	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
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
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		Hydrolytic half-life	60 days (t 1/2)	

		Compound Hydrolysis				
Silicon dioxide	7631-86-9	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Aluminium Oxide (non-fibrous)	1344-28-1	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
Heterocyclic Organic Compound	Trade Secret	Experimental Biodegradation	28 days	BOD	0 %BOD/ThOD	OECD 301F - Manometric respirometry
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 availblinsufficient	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
Silicon dioxide	7631-86-9	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
Disodium oxide	1313-59-3	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	
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	, ,	OECD 121 Estim. of Koc by HPLC
Heterocyclic Organic Compound	Trade Secret	Modeled Mobility in Soil	Koc	37,000 l/kg	Episuite <sup>TM</sup>

# 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. As a disposal alternative, incinerate 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**

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)	
14.1 UN number	Not applicable.	Not applicable.	Not applicable.	
14.2 UN proper shipping name	Not applicable.	Not applicable.	Not applicable.	
14.3 Transport hazard class(es)	Not applicable.	Not applicable.	Not applicable.	
14.4 Packing group	Not applicable.	Not applicable.	Not applicable.	
14.5 Environmental hazards	Not applicable.	Not applicable	Not applicable.	
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	Not applicable.	Not applicable.	Not applicable.	
Emergency Temperature	Not applicable.	Not applicable.	Not applicable.	
ADR Classification Code	M6	Not applicable.	Not applicable.	

D 14 C 1

IMDG Segregation	Not applicable.	Not applicable.	NONE
Code			

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 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:**

Section 8: Occupational exposure limit table information was modified.

OEL Reg Agency Desc information was modified.

Section 9: Flammability (solid, gas) information information was deleted.

Section 09: Flammability information information was added.

Section 14 Control Temperature – Regulation Data information was modified.

Section 14 Emergency Temperature – Regulation Data information was modified.

Section 14 Hazard Class + Sub Risk – Regulation Data information was modified.

Section 14 Other Dangerous Goods – Regulation Data information was modified.

Section 14 Packing Group – Regulation Data information was modified.

Section 14 Proper Shipping Name information was modified.

Section 14 UN Number Column data information was modified.

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