

# Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

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

#### 1.1. Product identifier

3M Spray 80 Neoprene Contact Adhesive.

#### **Product Identification Numbers**

YP-2080-6125-6

7000116787

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

#### **Identified uses**

Aerosol adhesive

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

**Address:** 3M Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18.

 Telephone:
 +353 1 280 3555

 E Mail:
 tox.uk@mmm.com

 Website:
 www.3M.com

# 1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

# **SECTION 2: Hazard identification**

#### 2.1. Classification of the substance or mixture

# CLP REGULATION (EC) No 1272/2008

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 aspiration hazard classification is not required because the product is an aerosol.

#### **CLASSIFICATION:**

Aerosol, Category 1 - Aerosol 1; H222, H229

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319

Reproductive Toxicity, Category 2 - Repr. 2; H361d

Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336

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

CLP REGULATION (EC) No 1272/2008

#### SIGNAL WORD

DANGER.

#### **Symbols**

GHS02 (Flame) |GHS07 (Exclamation mark) |GHS08 (Health Hazard) |GHS09 (Environment) |

#### **Pictograms**









#### **Ingredients:**

Ingredient	CAS Nbr	EC No.	% by Wt
methyl acetate	79-20-9	201-185-2	30 - 45
cyclohexane	110-82-7	203-806-2	10 - 25
toluene	108-88-3	203-625-9	3 - 7

### **HAZARD STATEMENTS:**

H222 Extremely flammable aerosol.

H229 Pressurised container: may burst if heated.

H315 Causes skin irritation. H319 Causes serious eye irritation.

H361d Suspected of damaging the unborn child.
H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

# PRECAUTIONARY STATEMENTS

#### **Prevention:**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.
P261E Avoid breathing vapour or spray.

P280K Wear protective gloves and respiratory protection.

Storage:

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

#### SUPPLEMENTAL INFORMATION:

# **Supplemental Hazard Statements:**

EUH208 Contains rosin. May produce an allergic reaction.

34% of the mixture consists of components of unknown acute oral toxicity.

#### 2.3. Other hazards

May displace oxygen and cause rapid suffocation.

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)	0/0	Classification according to Regulation (EC) No. 1272/2008 [CLP]
methyl acetate	(CAS-No.) 79-20-9 (EC-No.) 201-185-2	30 - 45	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
dimethyl ether	(CAS-No.) 115-10-6 (EC-No.) 204-065-8	25 - 40	Liquified gas, H280 Nota U
cyclohexane	(CAS-No.) 110-82-7 (EC-No.) 203-806-2	10 - 25	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1
Polychloroprene	Trade Secret	1 - 7	Substance not classified as hazardous
Phenol, polymer with formaldehyde, magnesium oxide complex	Trade Secret	3 - 7	Substance not classified as hazardous
toluene	(CAS-No.) 108-88-3 (EC-No.) 203-625-9	3 - 7	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Aquatic Chronic 3, H412
2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane	(CAS-No.) 31393-98-3	1 - 5	Aquatic Chronic 4, H413
zinc oxide	(CAS-No.) 1314-13-2 (EC-No.) 215-222-5	< 0.5	Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1
rosin	(CAS-No.) 8050-09-7 (EC-No.) 232-475-7	< 0.5	Skin Sens. 1B, H317
Benzene, ethenyl-, polymer with 1,3-butadiene and 2-methyl-1,3-butadiene, hydrogenated	Trade Secret	0 - 3	Substance not classified as hazardous

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2-Propenoic acid, 2-methyl-, 1,2-	Trade Secret	0 - 3	Substance not classified as hazardous
ethanediyl ester, polymer with 2-chloro-			
1,3-butadiene			
Hydrocarbons, C10-C12, isoalkanes,	(EC-No.) 923-037-2	< 3	Aquatic Chronic 2, H411
<2% aromatics			Flam. Liq. 3, H226
			Asp. Tox. 1, H304
			EUH066

Any entry in the Identifier(s) column that begins with the numbers 6, 7, 8, or 9 are a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance.

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

Wash with soap and water. If signs/symptoms develop, get medical attention.

#### Eve contact

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, 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 CLP classification include:

Irritation to the skin (localized redness, swelling, itching, and dryness). Serious irritation to the eyes (significant redness, swelling, pain, tearing, and impaired vision). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness).

### 4.3. Indication of any immediate medical attention and special treatment required

Not applicable.

# **SECTION 5: Fire-fighting measures**

#### 5.1. Extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

# 5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

# **Hazardous Decomposition or By-Products**

<u>Substance</u> Carbon monoxide Carbon dioxide. Condition

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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. 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. Warning! A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. 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.

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

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Close cylinder. Contain spill. Cover spill area with a fire-extinguishing foam. 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 using non-sparking tools. Place in a metal 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

For industrial/occupational use only. Not for consumer sale or use. Do not use in a confined area with minimal air exchange. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. 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 contact with oxidising agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (eg. gloves, respirators...) as required.

### 7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store away from heat. Store away from acids. Store away from oxidising agents.

### 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.

IngredientCAS Nbr<br/>tolueneAgency<br/>108-88-3Limit type<br/>Ireland OELsAdditional comments<br/>TWA(8 hours):50 ppm(192<br/>mg/m3);STEL(15 minutes):100

ppm(384 mg/m3)

cyclohexane	110-82-7	Ireland OELs	TWA(8 hours):200 ppm(700 mg/m3)
dimethyl ether	115-10-6	Ireland OELs	TWA(8 hours):1000 ppm(1920 mg/m3)
zinc oxide	1314-13-2	Ireland OELs	TWA(Respirable fraction & time) (8 hours):2 mg/m3;STEL(Respirable fraction & time) (15 minutes):10 mg/m3
methyl acetate	79-20-9	Ireland OELs	TWA(8 hours):200 ppm(610 mg/m3);STEL(15 minutes):250 ppm(760 mg/m3)

Ireland OELs : Ireland. OELs 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.

**Recommended monitoring procedures:** Information on recommended monitoring procedures can be obtained from Indust. Inspect./Ministry (IE)

### 8.2. Exposure controls

#### 8.2.1. Engineering controls

Do not remain in area where available oxygen may be reduced. 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:

Indirect vented goggles.

Applicable Norms/Standards

Use eye 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 organic vapours and particulates

Half facepiece or full facepiece supplied-air respirator

Organic vapour respirators may have short service life.

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

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 Gas. **Specific Physical Form:** Aerosol Colour Colourless Odor Sweet Odor No data available. Odour threshold

Melting point/freezing point Not applicable. Boiling point/boiling range No data available.

Flammability (solid, gas) Flammable Aerosol: Category 1.

Flammable Limits(LEL) No data available. Flammable Limits(UEL) No data available. -45 °C

Flash point

Autoignition temperature No data available. **Decomposition temperature** Not applicable.

substance/mixture is non-soluble (in water) pН

**Kinematic Viscosity** Not applicable.

Water solubility Nil Solubility- non-water Complete

Partition coefficient: n-octanol/water No data available. Vapour pressure No data available. Density 0.706 g/ml

0.7 [*Ref Std*:WATER=1] Relative density **Relative Vapor Density** No data available.

#### 9.2. Other information

9.2.2 Other safety characteristics

**EU Volatile Organic Compounds** No data available. **Evaporation rate** No data available. Percent volatile 86.64 % 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.

Sparks and/or flames.

#### 10.5 Incompatible materials

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 EU 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 internal hazard assessments.

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Signs and Symptoms of Exposure

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

#### Inhalation

May be harmful if inhaled. Simple asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal. 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

Mild Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, and dryness.

#### Eye contact

Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

#### Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

# **Additional Health Effects:**

### Single exposure may cause target organ effects:

Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

#### Prolonged or repeated exposure may cause target organ effects:

Ocular effects: Signs/symptoms may include blurred or significantly impaired vision. Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears. Olfactory effects: Signs/symptoms may include decreased ability to detect odours and complete loss of smell. 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.

# Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

# **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 >5,000 mg/kg
Overall product	Inhalation- Vapour(4 hr)		No data available; calculated ATE >20 - =50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
methyl acetate	Dermal	Rat	LD50 > 2,000 mg/kg
methyl acetate	Inhalation- Vapour (4 hours)	Rat	LC50 > 49 mg/l
methyl acetate	Ingestion	Rat	LD50 > 5,000 mg/kg
dimethyl ether	Inhalation- Gas (4 hours)	Rat	LC50 164,000 ppm
cyclohexane	Dermal	Rat	LD50 > 2,000 mg/kg
cyclohexane	Inhalation- Vapour (4 hours)	Rat	LC50 > 32.9 mg/l
cyclohexane	Ingestion	Rat	LD50 6,200 mg/kg
toluene	Dermal	Rat	LD50 12,000 mg/kg
toluene	Inhalation- Vapour (4 hours)	Rat	LC50 30 mg/l
toluene	Ingestion	Rat	LD50 5,550 mg/kg
Polychloroprene	Dermal		LD50 estimated to be > 5,000 mg/kg
Polychloroprene	Ingestion	Rat	LD50 > 20,000 mg/kg
Phenol, polymer with formaldehyde, magnesium oxide complex	Dermal		LD50 estimated to be > 5,000 mg/kg
Phenol, polymer with formaldehyde, magnesium oxide complex	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane	Ingestion	Rat	LD50 > 2,000 mg/kg
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Inhalation- Vapour	Professio nal judgeme nt	LC50 estimated to be 20 - 50 mg/l
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Dermal	Rabbit	LD50 > 5,000 mg/kg
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Ingestion	Rat	LD50 > 5,000 mg/kg
rosin	Dermal	Rabbit	LD50 > 2,500 mg/kg
rosin	Ingestion	Rat	LD50 7,600 mg/kg
zinc oxide	Dermal		LD50 estimated to be > 5,000 mg/kg
zinc oxide	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 5.7 mg/l
zinc oxide	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value
methyl acetate	Rabbit	No significant irritation
cyclohexane	Rabbit	Mild irritant
toluene	Rabbit	Irritant
Polychloroprene	Human	No significant irritation
2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-	In vitro	No significant irritation
methylenebicyclo[3.1.1]heptane	data	
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Rabbit	Mild irritant
rosin	Rabbit	No significant irritation
zinc oxide	Human	No significant irritation
	and	
	animal	

**Serious Eye Damage/Irritation** 

Name	Species	Value
methyl acetate	Rabbit	Moderate irritant
cyclohexane	Rabbit	Mild irritant
toluene	Rabbit	Moderate irritant
Polychloroprene	Professio	No significant irritation
	nal	
	judgemen	
	t	
2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-	In vitro	No significant irritation
methylenebicyclo[3.1.1]heptane	data	
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Rabbit	Mild irritant
rosin	Rabbit	Mild irritant
zinc oxide	Rabbit	Mild irritant

# **Skin Sensitisation**

Name	Species	Value
methyl acetate	Human	Not classified
toluene	Guinea	Not classified
	pig	
2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-	Multiple	Not classified
methylenebicyclo[3.1.1]heptane	animal	
	species	
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Guinea	Not classified
	pig	
rosin	Guinea	Sensitising
	pig	
zinc oxide	Guinea	Not classified
	pig	

**Respiratory Sensitisation** 

Name	Species	Value
rosin	Human	Not classified

**Germ Cell Mutagenicity** 

Name	Route	Value
methyl acetate	In Vitro	Not mutagenic
methyl acetate	In vivo	Not mutagenic
dimethyl ether	In Vitro	Not mutagenic
dimethyl ether	In vivo	Not mutagenic
cyclohexane	In Vitro	Not mutagenic
cyclohexane	In vivo	Some positive data exist, but the data are not sufficient for classification
toluene	In Vitro	Not mutagenic

toluene	In vivo	Not mutagenic
2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-	In Vitro	Not mutagenic
methylenebicyclo[3.1.1]heptane		
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	In Vitro	Not mutagenic
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	In vivo	Not mutagenic
zinc oxide	In Vitro	Some positive data exist, but the data are not
		sufficient for classification
zinc oxide	In vivo	Some positive data exist, but the data are not
		sufficient for classification

Carcinogenicity

Name	Route	Species	Value
dimethyl ether	Inhalation	Rat	Not carcinogenic
toluene	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
toluene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
toluene	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Not	Not	Not carcinogenic
	specified.	available	

# **Reproductive Toxicity**

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
dimethyl ether	Inhalation	Not classified for development	Rat	NOAEL 40,000 ppm	during organogenesis
cyclohexane	Inhalation	Not classified for female reproduction	Rat	NOAEL 24 mg/l	2 generation
cyclohexane	Inhalation	Not classified for male reproduction	Rat	NOAEL 24 mg/l	2 generation
cyclohexane	Inhalation	Not classified for development	Rat	NOAEL 6.9 mg/l	2 generation
toluene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
toluene	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.3 mg/l	1 generation
toluene	Ingestion	Toxic to development	Rat	LOAEL 520 mg/kg/day	during gestation
toluene	Inhalation	Toxic to development	Human	NOAEL Not available	poisoning and/or abuse
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	premating & during gestation
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	28 days
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Not specified.	Not classified for development	Rat	NOAEL Not available	during gestation
zinc oxide	Ingestion	Not classified for reproduction and/or development	Multiple animal species	NOAEL 125 mg/kg/day	premating & during gestation

# Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
methyl acetate	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
methyl acetate	Inhalation	respiratory irritation	May cause respiratory irritation	Human and animal	NOAEL Not available	

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methyl acetate	Inhalation	blindness	Not classified		NOAEL Not available	
methyl acetate	Ingestion	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
dimethyl ether	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Rat	LOAEL 10,000 ppm	30 minutes
dimethyl ether	Inhalation	cardiac sensitisation	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 100,000 ppm	5 minutes
cyclohexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
cyclohexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
cyclohexane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
toluene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
toluene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
toluene	Inhalation	immune system	Not classified	Mouse	NOAEL 0.004 mg/l	3 hours
toluene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	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
methyl acetate	data are not sufficient for classification		Rat	NOAEL 1.1 mg/l	28 days	
methyl acetate	Inhalation endocrine system   Not classified   hematopoietic   system   liver   immune system   kidney and/or   bladder		Rat	NOAEL 6.1 mg/l	28 days	
dimethyl ether	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 25,000 ppm	2 years
dimethyl ether	Inhalation	liver	Not classified	Rat	NOAEL 20,000 ppm	30 weeks
cyclohexane	Inhalation	liver	Not classified	Rat	NOAEL 24 mg/l	90 days
cyclohexane	Inhalation	auditory system	Not classified Rat		NOAEL 1.7 mg/l	90 days
cyclohexane	Inhalation	kidney and/or bladder	Not classified	Rabbit	NOAEL 2.7 mg/l	10 weeks
cyclohexane	Inhalation	hematopoietic system	Not classified	Mouse	NOAEL 24 mg/l	14 weeks
cyclohexane	Inhalation	peripheral nervous system	Not classified	Rat	NOAEL 8.6 mg/l	30 weeks
toluene	Inhalation	auditory system   eyes   olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
toluene	Inhalation	nervous system	May cause damage to organs though prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
toluene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2.3 mg/l	15 months
toluene	Inhalation	heart   liver   kidney and/or bladder	Not classified	Rat	NOAEL 11.3 mg/l	15 weeks
toluene	Inhalation	endocrine system	Not classified	Rat	NOAEL 1.1	4 weeks

					mg/l	
toluene	Inhalation	immune system	Not classified	Mouse	NOAEL Not available	20 days
toluene	Inhalation	bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 1.1 mg/l	8 weeks
toluene	Inhalation	hematopoietic system   vascular system	Not classified	Human	NOAEL Not available	occupational exposure
toluene	Inhalation	gastrointestinal tract	Not classified	Multiple animal species	NOAEL 11.3 mg/l	15 weeks
toluene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 625 mg/kg/day	13 weeks
toluene	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
toluene	Ingestion	liver   kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
toluene	Ingestion	hematopoietic system	Not classified	Mouse	NOAEL 600 mg/kg/day	14 days
toluene	Ingestion	endocrine system	Not classified	Mouse	NOAEL 105 mg/kg/day	28 days
toluene	Ingestion	immune system	Not classified	Mouse	NOAEL 105 mg/kg/day	4 weeks
2,6,6- Trimethylbicyclo[3.1.1]he pt-2-ene, polymer with 6,6-dimethyl-2- methylenebicyclo[3.1.1]he ptane	Ingestion	heart   gastrointestinal tract   hematopoietic system   liver   nervous system   eyes   kidney and/or bladder	Not classified	Rat	NOAEL 331 mg/kg/day	90 days
zinc oxide	Ingestion	nervous system	Not classified	Rat	NOAEL 600 mg/kg/day	10 days
zinc oxide	Ingestion	endocrine system   hematopoietic system   kidney and/or bladder	Not classified	Other	NOAEL 500 mg/kg/day	6 months

**Aspiration Hazard** 

Name	Value
cyclohexane	Aspiration hazard
toluene	Aspiration hazard
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Aspiration hazard

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 EU 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
methyl acetate	79-20-9	Bacteria	Experimental	16 hours	EC50	6,000 mg/l
methyl acetate	79-20-9	Green algae	Experimental	72 hours	EC50	>120 mg/l
methyl acetate	79-20-9	Water flea	Experimental	48 hours	EC50	1,026.7 mg/l
methyl acetate	79-20-9	Green algae	Experimental	72 hours	NOEC	120 mg/l
dimethyl ether	115-10-6	Bacteria	Experimental		EC10	>1,600 mg/l
dimethyl ether	115-10-6	Guppy	Experimental	96 hours	LC50	>4,100 mg/l
dimethyl ether	115-10-6	Water flea	Experimental	48 hours	EC50	>4,400 mg/l
cyclohexane	110-82-7	Bacteria	Experimental	24 hours	IC50	97 mg/l
cyclohexane	110-82-7	Fathead minnow	Experimental	96 hours	LC50	4.53 mg/l
cyclohexane	110-82-7	Water flea	Experimental	48 hours	EC50	0.9 mg/l
Phenol, polymer with formaldehyde, magnesium oxide complex	Trade Secret		Data not available or insufficient for classification			N/A
Polychloroprene	Trade Secret		Data not available or insufficient for classification			N/A
toluene	108-88-3	Coho Salmon	Experimental	96 hours	LC50	5.5 mg/l
toluene	108-88-3	Grass Shrimp	Experimental	96 hours	LC50	9.5 mg/l
toluene	108-88-3	Green algae	Experimental	72 hours	EC50	12.5 mg/l
toluene	108-88-3	Leopard frog	Experimental	9 days	LC50	0.39 mg/l
toluene	108-88-3	Pink Salmon	Experimental	96 hours	LC50	6.41 mg/l
toluene	108-88-3	Water flea	Experimental	48 hours	EC50	3.78 mg/l
toluene	108-88-3	Coho Salmon	Experimental	40 days	NOEC	1.39 mg/l
toluene	108-88-3	Diatom	Experimental	72 hours	NOEC	10 mg/l
toluene	108-88-3	Water flea	Experimental	7 days	NOEC	0.74 mg/l
toluene	108-88-3	Activated sludge	Experimental	12 hours	IC50	292 mg/l
toluene	108-88-3	Bacteria	Experimental	16 hours	NOEC	29 mg/l
toluene	108-88-3	Bacteria	Experimental	24 hours	EC50	84 mg/l
toluene	108-88-3	Redworm	Experimental	28 days	LC50	>150 mg per kg of bodyweight
toluene	108-88-3	Soil microbes	Experimental	28 days	NOEC	<pre>&lt;26 mg/kg (Dry Weight)</pre>
2,6,6- Trimethylbicyclo[3.1.1] hept-2-ene, polymer with 6,6-dimethyl-2- methylenebicyclo[3.1.1] heptane		Activated sludge	Experimental	3 hours	NOEC	1,000 mg/l
2,6,6- Trimethylbicyclo[3.1.1] hept-2-ene, polymer with 6,6-dimethyl-2-	31393-98-3	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l

methylenebicyclo[3.1.1	1					
heptane						
2,6,6- Trimethylbicyclo[3.1.1] hept-2-ene, polymer with 6,6-dimethyl-2- methylenebicyclo[3.1.1	31393-98-3	Water flea	Endpoint not reached	21 days	EL10	>100 mg/l
]heptane						
rosin	8050-09-7	Bacteria	Experimental		EC50	76.1 mg/l
rosin	8050-09-7	Green algae	Experimental	72 hours	EL50	>100 mg/l
rosin	8050-09-7	Water flea	Experimental	48 hours	EL50	911 mg/l
rosin	8050-09-7	Zebra Fish	Experimental	96 hours	LL50	>1 mg/l
rosin	8050-09-7	Green algae	Experimental	72 hours	NOEL	100 mg/l
zinc oxide	1314-13-2	Activated sludge	Estimated	3 hours	EC50	6.5 mg/l
zinc oxide	1314-13-2	Green algae	Estimated	72 hours	EC50	0.052 mg/l
zinc oxide	1314-13-2	Rainbow trout	Estimated	96 hours	LC50	0.21 mg/l
zinc oxide	1314-13-2	Water flea	Estimated	48 hours	EC50	0.07 mg/l
zinc oxide	1314-13-2	Green algae	Estimated	72 hours	NOEC	0.006 mg/l
zinc oxide	1314-13-2	Water flea	Estimated	7 days	NOEC	0.02 mg/l
2-Propenoic acid, 2- methyl-, 1,2-ethanediyl ester, polymer with 2- chloro-1,3-butadiene	Trade Secret		Data not available or insufficient for classification			N/A
Benzene, ethenyl-, polymer with 1,3- butadiene and 2- methyl-1,3-butadiene, hydrogenated	Trade Secret		Data not available or insufficient for classification			N/A
Hydrocarbons, C10- C12, isoalkanes, <2% aromatics	923-037-2	Green algae	Experimental	72 hours	EL50	>1,000 mg/l
Hydrocarbons, C10- C12, isoalkanes, <2% aromatics	923-037-2	Rainbow trout	Experimental	96 hours	LL50	>1,000 mg/l
Hydrocarbons, C10- C12, isoalkanes, <2% aromatics	923-037-2	Water flea	Experimental	48 hours	EL50	>1,000 mg/l
Hydrocarbons, C10- C12, isoalkanes, <2% aromatics	923-037-2	Green algae	Experimental	72 hours	NOEL	1,000 mg/l
Hydrocarbons, C10- C12, isoalkanes, <2% aromatics	923-037-2	Water flea	Experimental	21 days	NOEL	1 mg/l

# 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
methyl acetate	79-20-9	Experimental Biodegradation	28 days	BOD	70 % weight	OECD 301D - Closed bottle test
dimethyl ether	115-10-6	Experimental Photolysis		Photolytic half-life (in air)	12.4 days (t 1/2)	Non-standard method
dimethyl ether	115-10-6	Experimental Biodegradation	28 days	BOD	5 % weight	OECD 301D - Closed bottle test
cyclohexane	110-82-7	Experimental Photolysis		Photolytic half-life (in air)	4.14 days (t 1/2)	Non-standard method
cyclohexane	110-82-7	Experimental	28 days	BOD	77 %BOD/ThB	OECD 301F - Manometric

		Biodegradation			OD	respirometry
Phenol, polymer with formaldehyde, magnesium oxide complex	Trade Secret	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Polychloroprene	Trade Secret	Data not availbl- insufficient	N/A	N/A	N/A	N/A
toluene	108-88-3	Experimental Photolysis		Photolytic half-life (in air)	5.2 days (t 1/2)	
toluene	108-88-3	Experimental Biodegradation	20 days	BOD	80 %BOD/ThB OD	APHA Std Meth Water/Wastewater
2,6,6- Trimethylbicyclo[3.1.1]hept -2-ene, polymer with 6,6- dimethyl-2- methylenebicyclo[3.1.1]hep tane	31393-98-3	Experimental Biodegradation	28 days	BOD	4 %BOD/ThB OD	OECD 301D - Closed bottle test
rosin	8050-09-7	Experimental Biodegradation	28 days	CO2 evolution	64 % weight	OECD 301B - Modified sturm or CO2
zinc oxide	1314-13-2	Data not availbl- insufficient	N/A	N/A	N/A	N/A
2-Propenoic acid, 2- methyl-, 1,2-ethanediyl ester, polymer with 2- chloro-1,3-butadiene	Trade Secret	Data not availblinsufficient	N/A	N/A	N/A	N/A
Benzene, ethenyl-, polymer with 1,3-butadiene and 2- methyl-1,3-butadiene, hydrogenated	Trade Secret	Data not availblinsufficient	N/A	N/A	N/A	N/A
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2	Experimental Biodegradation	28 days	BOD	31.3 %BOD/Th BOD	OECD 301F - Manometric respirometry

# 12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
methyl acetate	79-20-9	Experimental Bioconcentration		Log Kow	0.18	Non-standard method
dimethyl ether	115-10-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
cyclohexane	110-82-7	Experimental BCF - Carp	56 days	Bioaccumulation factor	129	OECD 305E - Bioaccumulation flow- through fish test
Phenol, polymer with formaldehyde, magnesium oxide complex	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polychloroprene	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
toluene	108-88-3	Experimental BCF - Other	72 hours	Bioaccumulation factor	90	
toluene	108-88-3	Experimental Bioconcentration		Log Kow	2.73	
2,6,6- Trimethylbicyclo[3.1.1]hep t-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]he ptane		Experimental Bioconcentration		Log Kow	7.41	Non-standard method
rosin	8050-09-7	Estimated BCF - Rainbow Trout	20 days	Bioaccumulation factor	129	Non-standard method
zinc oxide	1314-13-2	Experimental BCF - Carp	56 days	Bioaccumulation factor	≤217	OECD 305E - Bioaccumulation flow- through fish test
2-Propenoic acid, 2- methyl-, 1,2-ethanediyl ester, polymer with 2- chloro-1,3-butadiene	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

Benzene, ethenyl-, polymer with 1,3-butadiene and 2- methyl-1,3-butadiene, hydrogenated		Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbons, C10-C12,	923-037-2	Estimated		Log Kow	> 4	Estimated: Octanol-water
isoalkanes, <2% aromatics		Bioconcentration				partition coefficient

#### 12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
toluene	108-88-3	Experimental	Koc	37-160 l/kg	
		Mobility in Soil			

#### 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. Endocrine disrupting properties

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

#### 12.7. Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

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

Incinerate in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. The facility should be equipped to handle gaseous waste. 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
16 05 04\* Gases in pressure containers (including halons) containing dangerous substances

#### EU waste code (product container after use)

15 01 04 Metallic packaging

# **SECTION 14: Transportation information**

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number or ID number	UN1950	UN1950	UN1950

14.2 UN proper shipping name	AEROSOLS	AEROSOLS, FLAMMABLE	AEROSOLS
14.3 Transport hazard class(es)	2.1	2.1	2.1
14.4 Packing group	Not applicable.	Not applicable.	Not applicable.
14.5 Environmental hazards	Not Environmentally Hazardous	Not applicable	Not a 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 Marine Transport in bulk according to IMO instruments	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
<b>Emergency Temperature</b>	No data available.	No data available.	No data available.
ADR Classification Code	5F	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

<b>Ingredient</b>	CAS Nbr	Classification	Regulation
Polychloroprene	Trade Secret	Gr. 3: Not classifiable	International Agency
			for Research on Cancer
toluene	108-88-3	Gr. 3: Not classifiable	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 through Annex XVII of REACH regulation to restrictions on the manufacture, placing on the market and use when present in certain dangerous substances, mixtures and articles. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

<u>Ingredient</u>	CAS Nbr
cyclohexane	110-82-7
toluene	108-88-3

Restriction status: listed in REACH Annex XVII

Restricted uses: See Annex XVII to Regulation (EC) No 1907/2006 for Conditions of Restriction

# Global inventory status

Contact 3M for more information.

#### **DIRECTIVE 2012/18/EU**

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		
P3a FLAMMABLE AEROSOLS	150 (net)	500 (net)

Seveso named dangerous substances, Annex 1, Part 2

Dangerous Substances	Identifier(s)	Qualifying quantity (tonnes	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements	
cyclohexane	110-82-7	10	50	
dimethyl ether	115-10-6	10	50	
methyl acetate	79-20-9	10	50	
toluene	108-88-3	10	50	
zinc oxide	1314-13-2	100	200	

### 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.

# **SECTION 16: Other information**

### List of relevant H statements

Repeated exposure may cause skin dryness or cracking.
Extremely flammable aerosol.
Highly flammable liquid and vapour.
Flammable liquid and vapour.
Pressurised container: may burst if heated.
Contains gas under pressure; may explode if heated.
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Suspected of damaging the unborn child.
May cause damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.
Toxic to aquatic life with long lasting effects.
Harmful to aquatic life with long lasting effects.
May cause long lasting harmful effects to aquatic life.

# **Revision information:**

- EU Section 09: pH information information was added.
- Section 1: Emergency telephone information was modified.
- CLP: Ingredient table information was modified.
- CLP Remark(phrase) information was deleted.
- Label: CLP Classification information was modified.
- Label: CLP Percent Unknown information was deleted.
- Label: CLP Precautionary Disposal information was deleted.
- Label: CLP Precautionary Prevention information was modified.
- Label: CLP Precautionary Response information was deleted.
- Label: CLP Precautionary Storage information was modified.
- List of sensitizers information was modified.
- Section 2: Other hazards phrase information was modified.
- Section 03: Composition table % Column heading information was added.
- Section 3: Composition/Information of ingredients table information was modified.
- Section 03: Substance not applicable information was added.
- Section 04: First Aid Symptoms and Effects (CLP) information was added.
- Section 4: First aid for skin contact information information was modified.
- Section 04: Information on toxicological effects information was modified.
- Section 5: Hazardous combustion products table information was modified.
- Section 6: Accidental release clean-up information information was modified.
- Section 6: Accidental release personal information information was modified.
- Section 7: Conditions safe storage information was modified.
- Section 7: Precautions safe handling information information was modified.
- Section 8: Eye/face protection information information was modified.
- Section 8: Occupational exposure limit table information was modified.
- OEL Reg Agency Desc information was modified.
- Section 8: Personal Protection Skin/body information information was deleted.
- Section 8: Skin protection protective clothing information information was deleted.
- Section 9: Evaporation Rate information information was deleted.
- Section 9: Explosive properties information information was deleted.
- Section 09: Kinematic Viscosity information information was added.
- Section 9: Melting point information information was modified.
- Section 9: Oxidising properties information information was deleted.
- Section 9: pH information information was deleted.
- Section 9: Property description for optional properties information was modified.
- Section 9: Vapour density value information was added.
- Section 9: Vapour density value information was deleted.
- Section 9: Viscosity information information was deleted.
- Section 11: Acute Toxicity table information was modified.
- Section 11: Aspiration Hazard Table information was modified.
- Section 11: Carcinogenicity Table information was modified.
- Section 11: Classification disclaimer information was modified.
- Section 11: Germ Cell Mutagenicity Table information was modified.
- Section 11: Health Effects Skin information information was modified.
- Section 11: No endocrine disruptor information available warning information was added.
- Section 11: Reproductive Hazards information information was deleted.
- Section 11: Reproductive Toxicity Table information was modified.
- Section 11: Reproductive/developmental effects information information was added.
- Section 11: Respiratory Sensitization Table information was modified.
- Section 11: Serious Eve Damage/Irritation Table information was modified.
- Section 11: Skin Corrosion/Irritation Table information was modified.
- Section 11: Skin Sensitization Table information was modified.
- Section 11: Target Organs Repeated Table information was added.
- Section 11: Target Organs Repeated Table information was deleted.
- Section 11: Target Organs Single Table information was modified.
- Section 12: 12.6. Endocrine Disrupting Properties information was added.

- Section 12: 12.7. Other adverse effects information was modified.
- Section 12: Component ecotoxicity information information was modified.
- Section 12: Contact manufacturer for more detail. information was deleted.
- Section 12: Mobility in soil information information was added.
- Section 12: No endocrine disruptor information available warning information was added.
- Section 12: Persistence and Degradability information information was modified.
- Section 12:Bioccumulative potential information information was modified.
- Section 14 Classification Code Main Heading information was added.
- Section 14 Classification Code Regulation Data information was added.
- Section 14 Control Temperature Main Heading information was added.
- Section 14 Control Temperature Regulation Data information was added.
- Section 14 Disclaimer Information information was added.
- Section 14 Emergency Temperature Main Heading information was added.
- Section 14 Emergency Temperature Regulation Data information was added.
- Section 14 Hazard Class + Sub Risk Main Heading information was added.
- Section 14 Hazard Class + Sub Risk Regulation Data information was added.
- Section 14 Hazardous/Not Hazardous for Transportation information was added.
- Section 14 Other Dangerous Goods Main Heading information was added.
- Section 14 Other Dangerous Goods Regulation Data information was added.
- Section 14 Packing Group Main Heading information was added.
- Section 14 Packing Group Regulation Data information was added.
- Section 14 Proper Shipping Name information was added.
- Section 14 Regulations Main Headings information was added.
- Section 14 Segregation Regulation Data information was added.
- Section 14 Segregation Code Main Heading information was added.
- Section 14 Special Precautions Main Heading information was added.
- Section 14 Special Precautions Regulation Data information was added.
- Section 14 Transport in bulk Regulation Data information was added.
- Section 14 Marine transport in bulk according to IMO instruments Main Heading information was added.
- Section 14 UN Number Column data information was added.
- Section 14 UN Number information was added.
- Section 15: Carcinogenicity information information was modified.
- Section 15: Label remarks and EU Detergent information was deleted.
- Section 15: Regulations Inventories information was added.
- Section 15: Restrictions on manufacture ingredients information information was modified.
- Section 15: Seveso Hazard Category Text information was added.
- Section 15: Seveso Substance Text information was added.
- Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was modified.
- Sectio 16: UK disclaimer information was deleted.
- Section 2: No PBT/vPvB information available warning 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.

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