

### **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

3М<sup>тм</sup> Contact Adhesive 10

### Product Identification Numbers

FS-9100-5030-1 FS-9100-5032-7

7000080206 7000080207

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

Identified uses Adhesive

#### **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 000E Mail:tox.uk@mmm.comWebsite: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 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 due to the product's viscosity.

### **CLASSIFICATION:**

Flammable Liquid, Category 2 - Flam. Liq. 2; H225 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315 Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319 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) |GHS09 (Environment) |

#### **Pictograms**



Ingredients: Ingredient	CAS Nbr	EC No.	% by Wt
acetone	67-64-1	200-662-2	15 - 40
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		927-510-4	15 - 30

#### HAZARD STATEMENTS:

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

#### PRECAUTIONARY STATEMENTS

Prevention: P210 P261E P273	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing vapour or spray. Avoid release to the environment.
Response:	
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if
D270 + D270	present and easy to do. Continue rinsing.
P370 + P378	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.
Disposal:	
P501	Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

### SUPPLEMENTAL INFORMATION:

### Supplemental Hazard Statements:

EUH208 Contains rosin. May produce an allergic reaction.

6% of the mixture consists of components of unknown acute oral toxicity.

Contains 6% 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]
acetone	(CAS-No.) 67-64-1 (EC-No.) 200-662-2 (REACH-No.) 01- 2119471330-49	15 - 40	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	(EC-No.) 927-510-4	15 - 30	Aquatic Chronic 2, H411 Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	(EC-No.) 931-254-9	8 - 18	Aquatic Chronic 2, H411 Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336
propyl acetate	(CAS-No.) 109-60-4 (EC-No.) 203-686-1	8 - 18	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066 Nota C
Polychloroprene	(CAS-No.) 9010-98-4	7 - 13	Substance not classified as hazardous
P-Tertiobutylphenol Formaldehyde Resin	Trade Secret	3 - 7	Substance not classified as hazardous
Magnesium oxide	(CAS-No.) 1309-48-4 (EC-No.) 215-171-9	< 5	Substance with a national occupational exposure limit
n-hexane	(CAS-No.) 110-54-3 (EC-No.) 203-777-6	< 3	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Repr. 2, H361f STOT SE 3, H336

				STOT RE 2, H373 Aquatic Chronic 2, H411
zinc oxide	(CAS-No.) 1314-13-2 (EC-No.) 215-222-5 (REACH-No.) 01- 2119463881-32	0.5 -	1	Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1
Talc	(CAS-No.) 14807-96-6 (EC-No.) 238-877-9	0.1 -	1	Substance with a national occupational exposure limit
cyclohexane	(CAS-No.) 110-82-7 (EC-No.) 203-806-2	< 1		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
rosin	(CAS-No.) 8050-09-7 (EC-No.) 232-475-7 (REACH-No.) 01- 2119480418-32	0.1 -	0.5	Skin Sens. 1B, H317

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

### **Specific Concentration Limits**

Ingredient	Identifier(s)	Specific Concentration Limits
	(CAS-No.) 110-54-3 (EC-No.) 203-777-6	(C >= 5%) STOT RE 2, H373

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. Remove contact lenses if easy to do. Continue rinsing. 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 flammable liquids such as dry chemical or carbon dioxide to extinguish.

### 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

Substance	<u>Condition</u>
Hydrocarbons.	During combustion.
Carbon monoxide	During combustion.
Carbon dioxide.	During combustion.
Hydrogen Chloride	During combustion.
	-

### 5.3. Advice for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. 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. 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. 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. Cover spill area with a fire extinguishing foam that is resistant to polar solvents. 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 handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. 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. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (eg. gloves, respirators...) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapour accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

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

Store in a well-ventilated place. Keep cool. Keep container tightly closed. 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.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
propyl acetate	109-60-4	UK HSC	TWA:849 mg/m3(200	
			ppm);STEL:1060 mg/m3(250	
n-hexane	110-54-3	UK HSC	ppm) TWA:72 mg/m3(20 ppm)	
			<b>e</b> (11)	
cyclohexane	110-82-7	UK HSC	TWA:350 mg/m <sup>3</sup> (100	
			ppm);STEL:1050 mg/m3(300	
			ppm)	
Magnesium oxide	1309-48-4	UK HSC	TWA (as Mg, respirable	
			dust/fume): 4 mg/m3; TWA (as	
			Mg, inhalable dust): 10 mg/m <sup>3</sup>	
DUST, INERT OR NUISANCE	1314-13-2	UK HSC	TWA(as respirable dust):4	
,			mg/m3;TWA(as inhalable	
			dust):10 mg/m3	
Talc	14807-96-6	UK HSC	TWA(as respirable dust):1	
			mg/m <sup>3</sup>	
acetone	67-64-1	UK HSC	TWA:1210 mg/m <sup>3</sup> (500	
			ppm);STEL:3620 mg/m <sup>3</sup> (1500	
			ppm)	
rosin	8050-09-7	UK HSC	TWA(as fume):0.05	Respiratory Sensitizer
			mg/m <sup>3</sup> ;STEL(as fume):0.15	
			mg/m <sup>3</sup>	

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.

#### Derived no effect level (DNEL)

Ingredient	Degradation Product	Population	Human exposure pattern	DNEL
zinc oxide		Worker	Dermal, Long-term	622 mg/cm2

		exposure (8 hours), Local effects	
zinc oxide	Worker	Dermal, Short-term exposure, Local effects	6,223 mg/cm2
zinc oxide	Worker	Inhalation, Long-term exposure (8 hours), Local effects	1.2 mg/m <sup>3</sup>
zinc oxide	Worker	Inhalation, Short-term exposure, Local effects	6.2 mg/m <sup>3</sup>
zinc oxide	Worker	Oral, Short-term exposure, Local effects	62.2 mg/kg bw/d
acetone	Worker	Dermal, Long-term exposure (8 hours), Systemic effects	186 mg/kg bw/d
acetone	Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	1,210 mg/m <sup>3</sup>
acetone	Worker	Inhalation, Short-term exposure, Local effects	2,420 mg/m <sup>3</sup>

### **Predicted no effect concentrations (PNEC)**

Ingredient	Degradation Product	Compartment	PNEC
zinc oxide		Agricultural soil	44.3 mg/kg d.w.
zinc oxide		Freshwater	0.0256 mg/l
zinc oxide		Freshwater sediments	146 mg/kg d.w.
zinc oxide		Marine water	0.0076 mg/l
zinc oxide		Marine water sediments	70.3 mg/kg d.w.
zinc oxide		Sewage Treatment Plant	0.0647 mg/l
acetone		Agricultural soil	29.5 mg/kg d.w.
acetone		Freshwater	10.6 mg/l
acetone		Freshwater sediments	30.4 mg/kg d.w.
acetone		Intermittent releases to water	21 mg/l
acetone		Marine water	1.06 mg/l
acetone		Marine water sediments	3.04 mg/kg d.w.
acetone		Sewage Treatment Plant	100 mg/l

**Recommended monitoring procedures:**Information on recommended monitoring procedures can be obtained from UK HSC

### 8.2. Exposure controls

In addition, refer to the annex for more information.

### 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. Use explosion-proof ventilation 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:

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

Applicable Norms/Standards Use gloves tested to EN 374

### **Respiratory protection**

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

Half facepiece or full facepiece air-purifying respirator suitable for 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

#### 8.2.3. Environmental exposure controls

Refer to Annex

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

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Liquid.
Colour	Yellow
Odor	Solvent
Odour threshold	No data available.
Melting point/freezing point	Not applicable.
Boiling point/boiling range	48 - 105 °C [ <i>Test Method</i> :Tested per ASTM protocol]
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	No data available.
Flammable Limits(UEL)	No data available.
Flash point	-26 °C
Autoignition temperature	No data available.
Decomposition temperature	No data available.
pH	substance/mixture is non-soluble (in water)
Kinematic Viscosity	848 mm <sup>2</sup> /sec

Water solubility Solubility- non-water Partition coefficient: n-octanol/water Vapour pressure Density Relative density Relative Vapor Density

9.2. Other information

9.2.2 Other safety characteristics
EU Volatile Organic Compounds
Evaporation rate
Percent volatile

No data available. No data available. No data available. No data available. 0.803 - 0.851 g/ml 0.803 - 0.851 [Ref Std:WATER=1] No data available.

No data available. No data available. 77 - 79 %

### **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** Heat. Sparks and/or flames.

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

10.6 Hazardous decomposition products

<u>Substance</u>

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.

Condition

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

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

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

### Eye contact

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired 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:

Peripheral neuropathy: Signs/symptoms may include tingling or numbress of the extremities, incoordination, weakness of the hands and feet, tremors and muscle atrophy.

#### **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	Inhalation- Vapour(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
acetone	Dermal	Rabbit	LD50 > 15,688 mg/kg
acetone	Inhalation- Vapour (4 hours)	Rat	LC50 76 mg/l
acetone	Ingestion	Rat	LD50 5,800 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Dermal	Rabbit	LD50 > 2,920 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Dermal	Rabbit	LD50 > 3,160 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Dermal	Rabbit	LD50 > 3,160 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Dermal	Rat	LD50 > 2,000 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation- Vapour (4 hours)	Rat	LC50 > 14.7 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation- Vapour (4 hours)	Rat	LC50 > 23.3 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation- Vapour (4 hours)	Rat	LC50 > 5.61 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Ingestion	Rat	LD50 > 5,000 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Ingestion	Rat	LD50 > 5,840 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Ingestion	Rat	LD50 > 5,000 mg/kg
propyl acetate	Dermal	Rabbit	LD50 > 17,756 mg/kg
propyl acetate	Inhalation- Vapour (4 hours)	Rat	LC50 >16.7, < 33.4 mg/l

propyl acetate	Ingestion	Rat	LD50 8,700 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Dermal	Rabbit	LD50 > 2,920 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Dermal	Rabbit	LD50 > 3,160 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Dermal	Rabbit	LD50 > 3,160 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Dermal	Rat	LD50 > 2,000 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation-	Rat	LC50 > 14.7 mg/l
	Vapour (4		
	hours)		
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation-	Rat	LC50 > 23.3 mg/l
	Vapour (4		
	hours)	-	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation-	Rat	LC50 > 5.61 mg/l
	Vapour (4		
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	hours) Ingestion	Rat	LD50 > 5,000 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Ingestion	Rat	LD50 > 5,840  mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Ingestion	Rat	LD50 > 5,000 mg/kg
Polychloroprene	Dermal	Kat	LD50 $>$ 5,000 mg/kg
Polychloroprene	Dermai		LD50 estimated to be > 5,000 mg/kg
Polychloroprene	Ingestion	Rat	LD50 > 20,000 mg/kg
Magnesium oxide	Dermal	Professio	LD50 estimated to be 2,000 - 5,000 mg/kg
		nal	
		judgeme	
		nt	
Magnesium oxide	Ingestion	Rat	LD50 3,870 mg/kg
n-hexane	Dermal	Rabbit	LD50 > 2,000 mg/kg
n-hexane	Inhalation-	Rat	LC50 170 mg/l
	Vapour (4 hours)		
n-hexane	Ingestion	Rat	LD50 > 28,700 mg/kg
zinc oxide	Dermal	Rat	LD50 $\neq$ 26,700 mg/kg
			, , ,
zinc oxide	Inhalation-	Rat	LC50 > 5.7 mg/l
	Dust/Mist		
· · · · ·	(4 hours)		
zinc oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
cyclohexane	Dermal	Rat	LD50 > 2,000 mg/kg
cyclohexane	Inhalation-	Rat	LC50 > 32.9 mg/l
	Vapour (4 hours)		
cyclohexane	Ingestion	Rat	LD50 6,200 mg/kg
rosin	Dermal	Rabbit	LD50 = 6,200  mg/kg LD50 > 2,500  mg/kg
rosin	Ingestion	Rat	LD50 7,600 mg/kg
Talc	Dermal	Nai	LD50 7,000 mg/kg LD50 estimated to be $> 5,000$ mg/kg
Talc	Ingestion		LD50 estimated to be $> 5,000 \text{ mg/kg}$

ATE = acute toxicity estimate

### **Skin Corrosion/Irritation**

Name	Species	Value
acetone	Mouse	Minimal irritation
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Rabbit	Irritant
propyl acetate	Rabbit	No significant irritation
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Rabbit	Irritant
Polychloroprene	Human	No significant irritation
Magnesium oxide	Professio	No significant irritation
	nal	
	judgemen	
	t	
n-hexane	Human	Mild irritant
	and	
	animal	
zinc oxide	Human	No significant irritation
	and	
	animal	

cyclohexane	Rabbit	Mild irritant
rosin	Rabbit	No significant irritation
Talc	Rabbit	No significant irritation

### Serious Eye Damage/Irritation

Name	Species	Value
acetone	Rabbit	Severe irritant
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Rabbit	No significant irritation
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Rabbit	Mild irritant
propyl acetate	Rabbit	Moderate irritant
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Rabbit	No significant irritation
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Rabbit	Mild irritant
Polychloroprene	Professio	No significant irritation
	nal	
	judgemen	
	t	
n-hexane	Rabbit	Mild irritant
zinc oxide	Rabbit	Mild irritant
cyclohexane	Rabbit	Mild irritant
rosin	Rabbit	Mild irritant
Talc	Rabbit	No significant irritation

### **Skin Sensitisation**

Name	Species	Value
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Guinea	Not classified
	pig	
propyl acetate	similar	Not classified
	compoun	
	ds	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Guinea	Not classified
	pig	
n-hexane	Human	Not classified
zinc oxide	Guinea	Not classified
	pig	
rosin	Guinea	Sensitising
	pig	

### **Respiratory Sensitisation**

Name	Species	Value
rosin	Human	Not classified
Talc	Human	Not classified

### Germ Cell Mutagenicity

Name	Route	Value
acetone	In vivo	Not mutagenic
acetone	In Vitro	Some positive data exist, but the data are not sufficient for classification
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	In Vitro	Not mutagenic
propyl acetate	In Vitro	Some positive data exist, but the data are not sufficient for classification
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	In Vitro	Not mutagenic
Magnesium oxide	In Vitro	Not mutagenic
n-hexane	In Vitro	Not mutagenic
n-hexane	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

cyclohexane	In Vitro	Not mutagenic
cyclohexane	In vivo	Some positive data exist, but the data are not sufficient for classification
Talc	In Vitro	Not mutagenic
Talc	In vivo	Not mutagenic

### Carcinogenicity

Name	Route	Species	Value
acetone	Not	Multiple	Not carcinogenic
	specified.	animal	
		species	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation	Mouse	Some positive data exist, but the data are not
			sufficient for classification
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation	Mouse	Some positive data exist, but the data are not
			sufficient for classification
Magnesium oxide	Not	Human	Some positive data exist, but the data are not
	specified.	and	sufficient for classification
		animal	
n-hexane	Dermal	Mouse	Not carcinogenic
n-hexane	Inhalation	Mouse	Some positive data exist, but the data are not
			sufficient for classification
Talc	Inhalation	Rat	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	
acetone	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,700 mg/kg/day	13 weeks	
acetone	Inhalation	Not classified for development	Rat	NOAEL 5.2 mg/l	during organogenesis	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	2 generation	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	2 generation	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Not specified.	Not classified for development	Rat	NOAEL Not available	2 generation	
propyl acetate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during gestation	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	2 generation	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	2 generation	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Not specified.	Not classified for development	Rat	NOAEL Not available	2 generation	
n-hexane	Ingestion	Not classified for development	Mouse	NOAEL 2,200 mg/kg/day	during organogenesis	
n-hexane	Inhalation	Not classified for development	Rat	NOAEL 0.7 mg/l	during gestation	
n-hexane	Ingestion	Toxic to male reproduction	Rat	NOAEL 1,140 mg/kg/day	90 days	
n-hexane	Inhalation	Toxic to male reproduction	Rat	LOAEL 3.52 mg/l	28 days	
zinc oxide	Ingestion	Not classified for reproduction and/or development	Multiple animal species	NOAEL 125 mg/kg/day	premating & during gestation	
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
Talc	Ingestion	Not classified for development	Rat	NOAEL 1,600 mg/kg	during organogenesis

### Target Organ(s)

### Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
acetone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
acetone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
acetone	Inhalation	immune system	Not classified	Human	NOAEL 1.19 mg/l	6 hours
acetone	Inhalation	liver	Not classified	Guinea pig	NOAEL Not available	
acetone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
propyl acetate	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Cat	NOAEL NA	
propyl acetate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	
propyl acetate	Inhalation	nervous system	Not classified	Rat	NOAEL NA	4 hours
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
Magnesium oxide	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	
n-hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
n-hexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL Not available	8 hours
n-hexane	Inhalation	respiratory system	Not classified	Rat	NOAEL 24.6 mg/l	8 hours

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	

### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
acetone	Dermal	eyes	Not classified	Guinea pig	NOAEL Not available	3 weeks
acetone	Inhalation	hematopoietic system	Not classified	Human	NOAEL 3 mg/l	6 weeks
acetone	Inhalation	immune system	Not classified	Human	NOAEL 1.19 mg/l	6 days
acetone	Inhalation	kidney and/or bladder	Not classified	Guinea pig	NOAEL 119 mg/l	not available
acetone	Inhalation	heart   liver	Not classified	Rat	NOAEL 45 mg/l	8 weeks
acetone	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 900 mg/kg/day	13 weeks
acetone	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
acetone	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 200 mg/kg/day	13 weeks
acetone	Ingestion	liver	Not classified	Mouse	NOAEL 3,896 mg/kg/day	14 days
acetone	Ingestion	eyes	Not classified	Rat	NOAEL 3,400 mg/kg/day	13 weeks
acetone	Ingestion	respiratory system	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
acetone	Ingestion	muscles	Not classified	Rat	NOAEL 2,500 mg/kg	13 weeks
acetone	Ingestion	skin   bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 11,298 mg/kg/day	13 weeks
propyl acetate	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.6 mg/l	90 days
propyl acetate	Inhalation	heart   skin   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   muscles   nervous system   eyes   kidney and/or bladder   vascular system	Not classified	Rat	NOAEL 6.4 mg/l	90 days
n-hexane	Inhalation	peripheral nervous system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
n-hexane	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Mouse	LOAEL 1.76 mg/l	13 weeks
n-hexane	Inhalation	liver	Not classified	Rat	NOAEL Not available	6 months

n-hexane	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 1.76 mg/l	6 months
n-hexane	Inhalation	hematopoietic system	Not classified	Mouse	NOAEL 35.2 mg/l	13 weeks
n-hexane	Inhalation	auditory system   immune system   eyes	Not classified	Human	NOAEL Not available	occupational exposure
n-hexane	Inhalation	heart   skin   endocrine system	Not classified	Rat	NOAEL 1.76 mg/l	6 months
n-hexane	Ingestion	peripheral nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,140 mg/kg/day	90 days
n-hexane	Ingestion	endocrine system   hematopoietic system   liver   immune system   kidney and/or bladder	Not classified	Rat	NOAEL Not available	13 weeks
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
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
Talc	Inhalation	pneumoconiosis	Repeated and prolonged exposure to large amounts of talc dust can cause lung injury	Human	NOAEL Not available	occupational exposure
Talc	Inhalation	pulmonary fibrosis   respiratory system	Not classified	Rat	NOAEL 18 mg/m <sup>3</sup>	113 weeks

### **Aspiration Hazard**

Name	Value
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Aspiration hazard
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Aspiration hazard
n-hexane	Aspiration hazard
cyclohexane	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	Туре	Exposure	Test endpoint	
acetone	67-64-1	Algae or other aquatic plants	Experimental	96 hours	EC50	11,493 mg/l
acetone	67-64-1	Invertebrate	Experimental	24 hours	LC50	2,100 mg/l
acetone	67-64-1	Rainbow trout	Experimental	96 hours	LC50	5,540 mg/l
acetone	67-64-1	Water flea	Experimental	21 days	NOEC	1,000 mg/l
acetone	67-64-1	Bacteria	Experimental	16 hours	NOEC	1,700 mg/l
acetone	67-64-1	Redworm	Experimental	48 hours	LC50	>100
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Green algae	Analogous Compound	72 hours	EL50	29 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Medaka	Analogous Compound	96 hours	LC50	0.561 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Water flea	Analogous Compound	48 hours	EC50	0.4 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Fathead minnow	Estimated	96 hours	LL50	8.2 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Green algae	Estimated	72 hours	EL50	3.1 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Green algae	Estimated	72 hours	EL50	29 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Green algae	Estimated	72 hours	EL50	55 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Water flea	Estimated	48 hours	EL50	3 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Water flea	Estimated	48 hours	EL50	4.5 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Water flea	Estimated	48 hours	LC50	3.9 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Rainbow trout	Experimental	96 hours	LL50	>13.4 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Green algae	Analogous Compound	72 hours	NOEL	6.3 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Water flea	Analogous Compound	21 days	NOEC	0.17 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Green algae	Estimated	72 hours	NOEL	0.5 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Green algae	Estimated	72 hours	NOEL	6.3 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Green algae	Estimated	72 hours	NOEL	30 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Water flea	Estimated	21 days	NOEL	1 mg/l

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Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Water flea	Estimated	21 days	NOEL	2.6 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Activated sludge	Analogous Compound	15 hours	IC50	29 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Green algae	Analogous Compound	72 hours	EL50	29 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Medaka	Analogous Compound	96 hours	LC50	0.561 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Water flea	Analogous Compound	48 hours	EC50	0.4 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Fathead minnow	Estimated	96 hours	LL50	8.2 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Green algae	Estimated	72 hours	EL50	3.1 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Green algae	Estimated	72 hours	EL50	29 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Green algae	Estimated	72 hours	EL50	55 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Water flea	Estimated	48 hours	EL50	3 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Water flea	Estimated	48 hours	EL50	4.5 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Water flea	Estimated	48 hours	LC50	3.9 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Rainbow trout	Experimental	96 hours	LL50	>13.4 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Green algae	Analogous Compound	72 hours	NOEL	6.3 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Water flea	Analogous Compound	21 days	NOEC	0.17 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Green algae	Estimated	72 hours	NOEL	0.5 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Green algae	Estimated	72 hours	NOEL	6.3 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Green algae	Estimated	72 hours	NOEL	30 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Water flea	Estimated	21 days	NOEL	1 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Water flea	Estimated	21 days	NOEL	2.6 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Activated sludge	Analogous Compound	15 hours	IC50	29 mg/l
propyl acetate	109-60-4	Activated sludge	Experimental	16 hours	IC50	>1,000 mg/l
propyl acetate	109-60-4	Fathead minnow	Experimental	96 hours	LC50	56 mg/l

propyl acetate	109-60-4	Green algae	Experimental	72 hours	EC50	672 mg/l
propyl acetate	109-60-4	Water flea	Experimental	48 hours	EC50	91.5 mg/l
propyl acetate	109-60-4	Green algae	Experimental	72 hours	NOEC	83.2 mg/l
Polychloroprene	9010-98-4		Data not available or insufficient for classification			N/A
Magnesium oxide	1309-48-4		Data not available or insufficient for classification			N/A
n-hexane	110-54-3	Fathead minnow	Experimental	96 hours	LC50	2.5 mg/l
n-hexane	110-54-3	Water flea	Experimental	48 hours	LC50	3.9 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
Talc	14807-96-6		Data not available or insufficient for classification			N/A
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
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
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### 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
acetone	67-64-1	Experimental	28 days	BOD	78 %BOD/ThO	OECD 301D - Closed bottle
		Biodegradation			D	test
acetone	67-64-1	Experimental		Photolytic half-life	147 days (t 1/2)	
		Photolysis		(in air)		
Hydrocarbons, C7, n-	927-510-4	Analogous	28 days	BOD	74.4 %BOD/Th	OECD 301F - Manometric
alkanes, isoalkanes, cyclics		Compound			OD	respirometry
		Biodegradation				
Hydrocarbons, C7, n-	927-510-4	Estimated	28 days	BOD	98 %BOD/CO	OECD 301F - Manometric
alkanes, isoalkanes, cyclics		Biodegradation			D	respirometry
Hydrocarbons, C7, n-	927-510-4	Estimated	28 days	BOD	77 %BOD/ThO	OECD 301F - Manometric
alkanes, isoalkanes, cyclics		Biodegradation			D	respirometry
Hydrocarbons, C7, n-	927-510-4	Estimated	28 days	BOD	98 %BOD/CO	OECD 301F - Manometric
alkanes, isoalkanes, cyclics		Biodegradation			D	respirometry
Hydrocarbons, C6,	931-254-9	Analogous	28 days	BOD	74.4 %BOD/Th	OECD 301F - Manometric
isoalkanes, < 5% n- hexane		Compound			OD	respirometry

		Biodegradation				
Hydrocarbons, C6,	931-254-9	Estimated	28 days	BOD	98 %BOD/CO	OECD 301F - Manometric
isoalkanes, < 5% n- hexane		Biodegradation			D	respirometry
Hydrocarbons, C6,	931-254-9	Estimated	28 days	BOD	77 %BOD/ThO	OECD 301F - Manometric
isoalkanes, < 5% n- hexane		Biodegradation			D	respirometry
Hydrocarbons, C6,	931-254-9	Estimated	28 days	BOD	98 %BOD/CO	OECD 301F - Manometric
isoalkanes, < 5% n- hexane		Biodegradation			D	respirometry
propyl acetate	109-60-4	Experimental	14 days	BOD	81 %BOD/ThO	OECD 301C - MITI test (I)
		Biodegradation			D	
Polychloroprene	9010-98-4	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Magnesium oxide	1309-48-4	Data not availbl- insufficient	N/A	N/A	N/A	N/A
n-hexane	110-54-3	Experimental Bioconcentration	28 days	BOD	100 %BOD/Th OD	OECD 301C - MITI test (I)
n-hexane	110-54-3	Experimental Photolysis		Photolytic half-life (in air)	5.4 days (t 1/2)	
cyclohexane	110-82-7	Experimental Biodegradation	28 days	BOD	77 %BOD/ThO D	OECD 301F - Manometric respirometry
cyclohexane	110-82-7	Experimental		Photolytic half-life	4.14 days (t	
		Photolysis		(in air)	1/2)	
Talc	14807-96-6	Data not availbl- insufficient	N/A	N/A	N/A	N/A
zinc oxide	1314-13-2	Data not availbl- insufficient	N/A	N/A	N/A	N/A
rosin	8050-09-7	Experimental Biodegradation	28 days	CO2 evolution	64 %CO2 evolution/THC O2 evolution	OECD 301B - Modified sturm or CO2

### **12.3 : Bioaccumulative potential**

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
acetone	67-64-1	Experimental BCF - Other		Bioaccumulation factor	0.65	
acetone	67-64-1	Experimental Bioconcentration		Log Kow	-0.24	
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Analogous Compound BCF - Fish	28 days	Bioaccumulation factor	540	OECD305-Bioconcentration
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Analogous Compound Bioconcentration		Log Kow	4.66	
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Estimated Bioconcentration		Log Kow	3.6	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Analogous Compound BCF - Fish	28 days	Bioaccumulation factor	540	OECD305-Bioconcentration
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Analogous Compound Bioconcentration		Log Kow	4.66	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Estimated Bioconcentration		Log Kow	3.6	
propyl acetate	109-60-4	Experimental Bioconcentration		Log Kow	1.4	

Polychloroprene	9010-98-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Magnesium oxide	1309-48-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
n-hexane	110-54-3	Modeled Bioconcentration		Bioaccumulation factor	50	Catalogic™
cyclohexane	110-82-7	Experimental BCF - Fish	56 days	Bioaccumulation factor	129	OECD305-Bioconcentration
Talc	14807-96-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
zinc oxide	1314-13-2	Experimental BCF - Fish	56 days	Bioaccumulation factor	≤217	OECD305-Bioconcentration
rosin	8050-09-7	Analogous Compound BCF - Fish	20 days	Bioaccumulation factor	129	

### 12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
acetone	67-64-1	Modeled Mobility in Soil	Кос	9.7 l/kg	Episuite <sup>TM</sup>
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics		Modeled Mobility in Soil	Koc	≥202 l/kg	Episuite™
Hydrocarbons, C6, isoalkanes, < 5% n- hexane		Modeled Mobility in Soil	Кос	≥202 l/kg	Episuite™

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

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

### **12.6. 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. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. As a disposal alternative, utilize an acceptable permitted waste disposal 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 or ID number	UN1133	UN1133	UN1133
14.2 UN proper shipping name	ADHESIVES	ADHESIVES	ADHESIVES
14.3 Transport hazard class(es)	3	3	3
14.4 Packing group	П	II	Ш
14.5 Environmental hazards	Not Environmentally Hazardous	Not applicable	Not a Marine Pollutant
	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 oulk according to IMO nstruments	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	F1	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 Polychloroprene <u>CAS Nbr</u> 9010-98-4 Classification Gr. 3: Not classifiable **Regulation** 

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.

Ingredient	CAS Nbr
cyclohexane	110-82-7
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 None

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
acetone	67-64-1	10	50
propyl acetate	109-60-4	10	50
zinc oxide	1314-13-2	100	200

#### Regulation (EU) No 649/2012

No chemicals listed

#### 15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this mixture. Chemical safety assessments for the contained substances may have been carried out by the registrants of the substances in accordance with Regulation (EC) No 1907/2006, as amended.

### **SECTION 16: Other information**

### List of relevant H statements

EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

#### **Revision information:**

EU Section 09: pH information information was modified.

Section 8: DNEL table row information was modified.

Section 8: Occupational exposure limit table information was modified.

Section 8: PNEC table row information was modified. Section 09: Kinematic Viscosity information information was modified. Section 11: Reproductive Toxicity Table information was modified. Section 11: Target Organs - Repeated Table information was added. Section 11: Target Organs - Repeated Table information was deleted. Section 12: Component ecotoxicity information information was modified. Section 12: Mobility in soil information information was modified. Section 12: Persistence and Degradability information information was modified. Section 12:Bioccumulative potential information information was modified. Section 14 Classification Code - Regulation Data information was modified. Section 14 Control Temperature - Regulation Data information was modified. Section 14 Emergency Temperature - Regulation Data information was modified. Section 14 Multiplier - Main Heading information was deleted. Section 14 Multiplier - Regulation Data information was deleted. Section 14 Other Dangerous Goods - Regulation Data information was modified. Section 14 Proper Shipping Name information was modified. Section 14 Segregation - Regulation Data information was modified. Section 14 Transport Category - Main Heading information was deleted. Section 14 Transport Category - Regulation Data information was deleted. Section 14 Transport in bulk - Regulation Data information was modified. Section 14 Marine transport in bulk according to IMO instruments - Main Heading information was modified. Section 14 Transport Not Permitted – Main Heading information was deleted. Section 14 Transport Not Permitted – Regulation Data information was deleted. Section 14 Tunnel Code - Main Heading information was deleted. Section 14 Tunnel Code - Regulation Data information was deleted.

Section 14 UN Number information was modified.

Section 15: Regulations - Inventories information was added.

Section 15: Seveso Substance Text information was added.

Section 2: No PBT/vPvB information available warning information was added.

### Annex

1. Title	
Substance identification	
Exposure Scenario Name	Formulation
Lifecycle Stage	Formulation or re-packing
Contributing activities	PROC 08a -Transfer of substance or mixture (charging and discharging) at non- dedicated facilities
	PROC 08b -Transfer of substance or mixture (charging and discharging) at dedicated facilities
	PROC 09 -Transfer of substance or mixture into small containers (dedicated filling line, including weighing) ERC 02 -Formulation into mixture
Processes, tasks and activities covered	Open sampling. Transfers with dedicated controls, including loading, filling, dumping, bagging. Transfers without dedicated controls, including loading, filling, dumping, bagging.
2. Operational conditions and risk mana	
Operating Conditions	Physical state:Liquid.
	General operating conditions:
	Assumes use at not more than 20°C above ambient temperature;
	Continuous release;
	Duration of exposure per day at workplace [for one worker]: 8 hours/day; Emission days per year: 100 days per year;
Risk management measures	Under the operational conditions described above the following risk management measures apply:
	General risk management measures:

	Human health: None needed; Environmental: None needed;
Waste management measures	Do not release to waterways or sewers;
	Incinerate in a permitted hazardous waste incinerator;
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and
	PNECs when the identified risk management measures are adopted.

1. Title	
Substance identification	zinc oxide; EC No. 215-222-5; CAS Nbr 1314-13-2;
Exposure Scenario Name	Formulation
Lifecycle Stage	Formulation or re-packing
Contributing activities	PROC 08a -Transfer of substance or mixture (charging and discharging) at non- dedicated facilities PROC 08b -Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC 09 -Transfer of substance or mixture into small containers (dedicated filling line, including weighing) ERC 02 -Formulation into mixture
Processes, tasks and activities covered	Open sampling. Transfer of substance/mixture with dedicated engineering controls. Transfers without dedicated controls, including loading, filling, dumping, bagging.
2. Operational conditions and risk mana	agement measures
Operating Conditions	Physical state:Liquid. General operating conditions: Continuous release; Frequency of exposure at workplace [for one worker]: 8 hours/day; Used amount or applied quantity per task/application by worker: 50 tonnes per year;
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: Goggles - Chemical resistant; Protective clothing / Wear suitable protective clothing; Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Refer to Section 8 of the SDS for specific glove material.; Environmental: Waste Water treatment - Incineration;
Waste management measures	Do not release to waterways or sewers; Incinerate in a permitted hazardous waste incinerator; Send to a municipal sewage treatment plant;
3. Prediction of exposure	•
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

1. Title	
Substance identification	
Exposure Scenario Name	Formulation
Lifecycle Stage	Formulation or re-packing

Contributing activities Processes, tasks and activities covered	PROC 08a -Transfer of substance or mixture (charging and discharging) at non- dedicated facilitiesPROC 08b -Transfer of substance or mixture (charging and discharging) at dedicated facilitiesPROC 09 -Transfer of substance or mixture into small containers (dedicated filling line, including weighing)ERC 02 -Formulation into mixtureOpen sampling. Transfers with dedicated controls, including loading, filling, 
2. Operational conditions and risk mana	
Operating Conditions	Physical state:Liquid. General operating conditions: Assumes use at not more than 20°C above ambient temperature; Continuous release; Duration of exposure per day at workplace [for one worker]: 8 hours/day; Emission days per year: 100 days per year;
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: None needed; Environmental: None needed;
Waste management measures	Do not release to waterways or sewers; Incinerate in a permitted hazardous waste incinerator;
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

1. Title	
Substance identification	acetone; EC No. 200-662-2; CAS Nbr 67-64-1;
Exposure Scenario Name	Formulation
Lifecycle Stage	Formulation or re-packing
Contributing activities Processes, tasks and activities covered	PROC 08a -Transfer of substance or mixture (charging and discharging) at non- dedicated facilitiesPROC 08b -Transfer of substance or mixture (charging and discharging) at dedicated facilitiesPROC 09 -Transfer of substance or mixture into small containers (dedicated filling line, including weighing)ERC 02 -Formulation into mixtureOpen sampling. Transfer of substance/mixture with dedicated engineering controls. Transfers with dedicated controls, including loading, filling, dumping,
2. Operational conditions and risk mana	bagging.
Operating Conditions	Physical state:Liquid. General operating conditions: Assumes use at not more than 20°C above ambient temperature; Duration of exposure per day at workplace [for one worker]: 8 hours/day; Indoor use with Local Exhaust Ventilation;
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures:

	Human health: Goggles - Chemical resistant; Environmental: None needed;
Waste management measures	No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions:
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

1. Title	
Substance identification	zinc oxide; EC No. 215-222-5; CAS Nbr 1314-13-2;
Exposure Scenario Name	Industrial Use of Adhesives
Lifecycle Stage	Use at industrial sites
Contributing activities	PROC 07 -Industrial spraying PROC 10 -Roller application or brushing PROC 13 -Treatment of articles by dipping and pouring ERC 06d -Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article)
Processes, tasks and activities covered	Can be applied by rolling or spraying.
2. Operational conditions and risk mana	
Operating Conditions	Physical state:Liquid. General operating conditions: Continuous release; Frequency of exposure at workplace [for one worker]: 8 hours/day; Used amount or applied quantity per task/application by worker: 50 tonnes per year;
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: Goggles - Chemical resistant; Protective clothing / Wear suitable protective clothing; Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Refer to Section 8 of the SDS for specific glove material.; Environmental: None needed;
Waste management measures	Do not release to waterways or sewers; Incinerate in a permitted hazardous waste incinerator; Send to a municipal sewage treatment plant;
3. Prediction of exposure	·
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

1. Title	
Substance identification	
Exposure Scenario Name	Industrial Use of Adhesives
Lifecycle Stage	Use at industrial sites
Contributing activities	PROC 07 -Industrial spraying
	PROC 10 -Roller application or brushing
	ERC 04 -Use of non-reactive processing aid at industrial site (no inclusion into or
	onto article)
Processes, tasks and activities covered	Application of product with a roller or brush. Spraying of substances/mixtures.

2. Operational conditions and risk man	nagement measures
Operating Conditions	Physical state:Liquid.General operating conditions:Assumes use at not more than 20°C above ambient temperature;Continuous release;Duration of exposure per day at workplace [for one worker]: 8 hours/day;Emission days per year: 20 days per year;
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: None needed; Environmental: None needed;
Waste management measures	Do not release to waterways or sewers; Incinerate in a permitted hazardous waste incinerator;
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

1. Title	
Substance identification	acetone; EC No. 200-662-2; CAS Nbr 67-64-1;
Exposure Scenario Name	Industrial Use of Adhesives
Lifecycle Stage	Use at industrial sites
Contributing activities	PROC 07 -Industrial spraying ERC 04 -Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
Processes, tasks and activities covered	Application of product. Spraying of substances/mixtures.
2. Operational conditions and risk mana	gement measures
Operating Conditions	Physical state:Liquid. General operating conditions: Assumes use at not more than 20°C above ambient temperature; Duration of exposure per day at workplace [for one worker]: 8 hours/day;
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: Full-facepiece air-purifying respirator; Goggles - Chemical resistant; Half-facepiece air-purifying respirator; Environmental: None needed;
Waste management measures	No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions:
3. Prediction of exposure	
	Human and environmental exposures are not expected to exceed the DNELs and

1. Title	
Substance identification	acetone;
	EC No. 200-662-2;
	CAS Nbr 67-64-1;

Exposure Scenario Name	Industrial Use of Adhesives
Lifecycle Stage	Use at industrial sites
Contributing activities	PROC 10 -Roller application or brushing
	ERC 04 -Use of non-reactive processing aid at industrial site (no inclusion into or
	onto article)
Processes, tasks and activities covered	Application of product with a roller or brush.
2. Operational conditions and risk mana	gement measures
<b>Operating Conditions</b>	Physical state: Liquid.
	General operating conditions:
	Assumes use at not more than 20°C above ambient temperature;
	Duration of exposure per day at workplace [for one worker]: 8 hours/day;
Risk management measures	Under the operational conditions described above the following risk management measures apply:
	General risk management measures:
	Human health:
	Goggles - Chemical resistant;
	Environmental:
	None needed;
Waste management measures	No use-specific waste management measures are required for this product. Refer
	to Section 13 of main SDS for disposal instructions:
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

1. Title			
Substance identification			
Exposure Scenario Name	Industrial Use of Coatings		
Lifecycle Stage	Use at industrial sites		
Contributing activities	<ul> <li>PROC 01 -Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.</li> <li>PROC 02 -Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</li> <li>PROC 07 -Industrial spraying</li> <li>PROC 10 -Roller application or brushing</li> <li>ERC 04 -Use of non-reactive processing aid at industrial site (no inclusion into or onto article)</li> </ul>		
Processes, tasks and activities covered	Application of product with a roller or brush. Spraying of substances/mixtures.		
2. Operational conditions and risk mana	2. Operational conditions and risk management measures		
Operating Conditions	<ul> <li>Physical state:Liquid.</li> <li>General operating conditions:</li> <li>Assumes use at not more than 20°C above ambient temperature;</li> <li>Continuous release;</li> <li>Duration of exposure per day at workplace [for one worker]: 8 hours/day;</li> <li>Emission days per year: 20 days per year;</li> </ul>		
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: None needed; Environmental: None needed;		
Waste management measures	Do not release to waterways or sewers; Incinerate in a permitted hazardous waste incinerator;		

3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and
	PNECs when the identified risk management measures are adopted.

1. Title	
Substance identification	zinc oxide; EC No. 215-222-5; CAS Nbr 1314-13-2;
Exposure Scenario Name	Professional Use of Adhesives
Lifecycle Stage	Widespread use by professional workers
Contributing activities	PROC 10 -Roller application or brushing PROC 11 -Non industrial spraying PROC 13 -Treatment of articles by dipping and pouring ERC 08c -Widespread use leading to inclusion into/onto article (indoor)
Processes, tasks and activities covered	Can be applied by rolling or spraying.
2. Operational conditions and risk mana	gement measures
Operating Conditions	Physical state:Liquid.
	General operating conditions: Continuous release; Frequency of exposure at workplace [for one worker]: 8 hours/day; Used amount or applied quantity per task/application by worker: 50 tonnes per year;
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: Goggles - Chemical resistant; Protective clothing / Wear suitable protective clothing; Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Refer to Section 8 of the SDS for specific glove material.; Environmental: None needed;
Waste management measures	Do not release to waterways or sewers;
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

1. Title	1. Title	
Substance identification		
Exposure Scenario Name	Professional Use of Adhesives	
Lifecycle Stage	Widespread use by professional workers	
Contributing activities	PROC 10 -Roller application or brushing PROC 11 -Non industrial spraying ERC 08a -Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC 08d -Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)	
Processes, tasks and activities covered	Application of product with a roller or brush. Spraying of substances/mixtures.	
2. Operational conditions and risk mana	gement measures	
Operating Conditions	<ul> <li>Physical state:Liquid.</li> <li>General operating conditions:</li> <li>Assumes use at not more than 20°C above ambient temperature;</li> <li>Continuous release;</li> <li>Duration of exposure per day at workplace [for one worker]: 8 hours/day;</li> <li>Emission days per year: 365 days/year;</li> </ul>	

Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: None needed; Environmental: None needed;	
Waste management measures	Do not release to waterways or sewers;	
3. Prediction of exposure		
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.	

1. Title		
Substance identification	acetone; EC No. 200-662-2; CAS Nbr 67-64-1;	
Exposure Scenario Name	Professional Use of Adhesives	
Lifecycle Stage	Widespread use by professional workers	
Contributing activities	PROC 10 -Roller application or brushing ERC 08a -Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC 08d -Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)	
Processes, tasks and activities covered	Application of product with a roller or brush.	
2. Operational conditions and risk management measures		
Operating Conditions	Physical state:Liquid. General operating conditions: Assumes use at not more than 20°C above ambient temperature; Duration of exposure per day at workplace [for one worker]: 4 hours/day;	
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: Goggles - Chemical resistant; Environmental: None needed;	
Waste management measures	No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions:	
3. Prediction of exposure		
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.	

1. Title	
Substance identification	acetone;
	EC No. 200-662-2;
	CAS Nbr 67-64-1;
Exposure Scenario Name	Professional Use of Adhesives
Lifecycle Stage	Widespread use by professional workers
Contributing activities	PROC 11 -Non industrial spraying
	ERC 08a -Widespread use of non-reactive processing aid (no inclusion into or
	onto article, indoor)
	ERC 08d -Widespread use of non-reactive processing aid (no inclusion into or
	onto article, outdoor)
Processes, tasks and activities covered	Application of product. Spraying of substances/mixtures.

2. Operational conditions and risk management measures		
Operating Conditions	<ul> <li>Physical state:Liquid.</li> <li>General operating conditions:</li> <li>Assumes use at not more than 20°C above ambient temperature;</li> <li>Duration of exposure per day at workplace [for one worker]: 4 hours/day;</li> </ul>	
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: Goggles - Chemical resistant; Environmental: None needed;	
Waste management measures	No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions:	
3. Prediction of exposure		
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.	

1. Title	
Substance identification	
Exposure Scenario Name	Professional Use of Coatings
Lifecycle Stage	Widespread use by professional workers
Contributing activities	PROC 10 -Roller application or brushing
	PROC 11 -Non industrial spraying
	ERC 08a -Widespread use of non-reactive processing aid (no inclusion into or
	onto article, indoor)
	ERC 08d -Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
Processes, tasks and activities covered	Application of product with a roller or brush. Spraying of substances/mixtures.
2. Operational conditions and risk mana	
Operating Conditions	Physical state:Liquid.
	General operating conditions:
	Assumes use at not more than 20°C above ambient temperature;
	Continuous release;
	Duration of exposure per day at workplace [for one worker]: 8 hours/day;
	Emission days per year: 365 days/year;
Risk management measures	Under the operational conditions described above the following risk management
	measures apply:
	General risk management measures:
	Human health: None needed;
	Environmental:
	None needed;
	None needed,
Waste management measures	Do not release to waterways or sewers;
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

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 United Kingdom MSDSs are available at www.3M.com/uk