# Security data sheet



**Product:** 1300L

Manufacturer: 3M DEUTSCHLAND GMBH

Product group: **KLEBSTOFF** 

LÖSEMITTEL Article group:

Download: 28.04.2024

SCOTCH-WELD 1300L TF

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# **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<sup>™</sup> Rubber Adhesive 1300L TF

#### **Product Identification Numbers**

UU-0015-1018-7 UU-0015-1694-5

7100036384 7100036550

#### 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 858 000

 E Mail:
 tox.uk@mmm.com

 Website:
 www.3M.com/uk

## 1.4. Emergency telephone number

+44 (0)1344 858 000

## **SECTION 2: Hazard identification**

# 2.1. Classification of the substance or mixture 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
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		927-510-4	20 - 40
butanone	78-93-3	201-159-0	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 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261A Avoid breathing vapours.

P273 Avoid release to the environment.

**Response:** 

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

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.

11% of the mixture consists of components of unknown acute oral toxicity.

Contains 11% of components with unknown hazards to the aquatic environment.

## 2.3. Other hazards

None known.

# **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]
Hydrocarbons, C7, n-alkanes, isoalkanes,	(EC-No.) 927-510-4	20 - 40	Aquatic Chronic 2, H411
cyclics			Flam. Liq. 2, H225
			Asp. Tox. 1, H304
			Skin Irrit. 2, H315
			STOT SE 3, H336
butanone	(CAS-No.) 78-93-3	15 - 30	Flam. Liq. 2, H225
	(EC-No.) 201-159-0		Eye Irrit. 2, H319
	(REACH-No.) 01-		STOT SE 3, H336
	2119457290-43		EUH066
Hydrocarbons, C6, isoalkanes, < 5% n-	(EC-No.) 931-254-9	10 - 20	Aquatic Chronic 2, H411
hexane			Flam. Liq. 2, H225
			Asp. Tox. 1, H304
			Skin Irrit. 2, H315
			STOT SE 3, H336
P-Tertiobutylphenol Formaldehyde Resin	Trade Secret	7 - 13	Substance not classified as hazardous
Polychloroprene	(CAS-No.) 9010-98-4	7 - 13	Substance not classified as hazardous
propyl acetate	(CAS-No.) 109-60-4	7 - 13	Flam. Liq. 2, H225
	(EC-No.) 203-686-1	, 13	Eye Irrit. 2, H319
	(20 110.) 203 000 1		STOT SE 3, H336
			EUH066
			Nota C
Magnesium oxide	(CAS-No.) 1309-48-4	1 - 5	Substance with a national occupational
	(EC-No.) 215-171-9		exposure limit
			1
P-CRESOL, REACTION PRODUCTS	(CAS-No.) 68610-51-5	0.1 - 1	Aquatic Chronic 4, H413
WITH DICYCLOPENTADIENE AND	(EC-No.) 271-867-2		Repr. 2, H361d
ISOBUTYLENE	(REACH-No.) 01-		
	2119496062-39		
zinc oxide	(CAS-No.) 1314-13-2	0.1 - 1	Aquatic Acute 1, H400,M=1
	(EC-No.) 215-222-5		Aquatic Chronic 1, H410,M=1

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(REACH-No.) 01- 2119463881-32		
(CAS-No.) 8050-09-7 (EC-No.) 232-475-7	0.1 - 1	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

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

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

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
Hydrocarbons.
Carbon monoxide
Carbon dioxide.
Hydrogen Chloride

## Condition

During combustion.
During combustion.
During combustion.
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	<b>Additional comments</b>
propyl acetate	109-60-4	UK HSC	TWA:849 mg/m3(200	
			ppm);STEL:1060 mg/m3(250	
			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	
butanone	78-93-3	UK HSC	TWA: 600 mg/m <sup>3</sup> (200 ppm);	SKIN
			STEL: 899 mg/m <sup>3</sup> (300 ppm)	
rosin	8050-09-7	UK HSC	TWA(as fume):0.05	Respiratory Sensitizer
			mg/m³;STEL(as fume):0.15	
			mg/m³	

UK HSC: UK Health and Safety Commission

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

CEIL: Ceiling

## **Biological limit values**

Ingredient	CAS Nbr	Agency	Determinant	Biological Specimen	Sampling Time	Value	Additional comments
butanone	78-93-3	UK EH40 BMGVs	Butan-2-one	Urine	EOS	70 umol/L	

UK EH40 BMGVs : UK. EH40 Biological Monitoring Guidance Values (BMGVs)

EOS: End of shift.

## Derived no effect level (DNEL)

Ingredient	Degradation	Population	Human exposure	DNEL
	Product		pattern	
Hydrocarbons, C6,		Worker	Dermal, Long-term	13,964 mg/kg bw/d
isoalkanes, < 5% n-			exposure (8 hours),	
hexane			Systemic effects	
Hydrocarbons, C6,		Worker	Inhalation, Long-term	5,306 mg/m <sup>3</sup>
isoalkanes, < 5% n-			exposure (8 hours),	
hexane			Systemic effects	
Hydrocarbons, C7, n-		Worker	Dermal, Long-term	13,964 mg/kg bw/d
alkanes, isoalkanes,			exposure (8 hours),	
cyclics			Systemic effects	
Hydrocarbons, C7, n-		Worker	Inhalation, Long-term	$5,306 \text{ mg/m}^3$
alkanes, isoalkanes,			exposure (8 hours),	
cyclics			Systemic effects	
Hydrocarbons, C6,		Worker	Dermal, Long-term	300 mg/kg bw/d
isoalkanes, < 5% n-			exposure (8 hours),	
hexane			Systemic effects	
Hydrocarbons, C6,		Worker	Inhalation, Long-term	2,085 mg/m <sup>3</sup>
isoalkanes, < 5% n-			exposure (8 hours),	
hexane			Systemic effects	
Hydrocarbons, C7, n-		Worker	Dermal, Long-term	300 mg/kg bw/d
alkanes, isoalkanes,			exposure (8 hours),	
cyclics			Systemic effects	
Hydrocarbons, C7, n-		Worker	Inhalation, Long-term	2,085 mg/m <sup>3</sup>

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alkanes, isoalkanes,		exposure (8 hours),	
cyclics		Systemic effects	
butanone	Worker	Dermal, Long-term exposure (8 hours), Systemic effects	1,161 mg/kg bw/d
butanone	Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	600 mg/m <sup>3</sup>
zinc oxide	Worker	Dermal, Long-term exposure (8 hours), Local effects	622 mg/cm2
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/m³
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
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Worker	Dermal, Long-term exposure (8 hours), Systemic effects	300 mg/kg bw/d
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	2,085 mg/m <sup>3</sup>
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Worker	Dermal, Long-term exposure (8 hours), Systemic effects	300 mg/kg bw/d
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	2,085 mg/m³

Ingredient	Degradation Product	Compartment	PNEC
butanone		Agricultural soil	22.5 mg/kg d.w.
butanone		Freshwater	55.8 mg/l
butanone		Freshwater sediments	284.7 mg/kg d.w.
butanone		Intermittent releases to water	55.8 mg/l
butanone		Marine water	55.8 mg/l
butanone		Marine water sediments	284.7 mg/kg d.w.
butanone		Sewage Treatment Plant	709 mg/l
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
Hydrocarbons, C6, isoalkanes, < 5% n- hexane		Agricultural soil	0.53 mg/kg d.w.

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Hydrocarbons, C6,	Freshwater	0.096 mg/l
isoalkanes, < 5% n- hexane		
Hydrocarbons, C6,	Freshwater sediments	2.5 mg/kg d.w.
isoalkanes, < 5% n- hexane		
Hydrocarbons, C6,	Marine water	0.096 mg/l
isoalkanes, < 5% n- hexane		
Hydrocarbons, C6,	Marine water sediments	2.5 mg/kg d.w.
isoalkanes, < 5% n- hexane		
Hydrocarbons, C7, n-	Agricultural soil	0.53 mg/kg d.w.
alkanes, isoalkanes, cyclics		
Hydrocarbons, C7, n-	Freshwater	0.096 mg/l
alkanes, isoalkanes, cyclics		
Hydrocarbons, C7, n-	Freshwater sediments	2.5 mg/kg d.w.
alkanes, isoalkanes, cyclics		
Hydrocarbons, C7, n-	Marine water	0.096 mg/l
alkanes, isoalkanes, cyclics		
Hydrocarbons, C7, n-	Marine water sediments	2.5 mg/kg d.w.
alkanes, isoalkanes, cyclics		

**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:

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

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 (see just above)

ColourYellowOdorSolvent

Odour thresholdNo data available.Melting point/freezing pointNo data available.

**Boiling point/boiling range** >=48 °C [*Details:* Data for Aliphatic hydrocarbons]

Flammability (solid, gas)

Flammable Limits(LEL)

Flammable Limits(UEL)

No data available.

No data available.

Flash point <=0 °C [Test Method:Closed Cup] [Details:Data for Aliphatic

hydrocarbons] *No data available. No data available.* 

**Decomposition temperature**No data available.

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

Kinematic Viscosity

352.9 mm²/sec

Water solubility

No data available.

Solubility- non-water

No data available.

Partition coefficient: n-octanol/water

No data available.

Vapour pressure

No data available.

No data available.

No data available.

**Relative density** 0.85 - 0.87 [*Ref Std*:WATER=1]

**Relative Vapor Density** *No data available.* 

#### 9.2. Other information

9.2.2 Other safety characteristics

**Autoignition temperature** 

EU Volatile Organic CompoundsNo data available.Evaporation rateNo data available.Percent volatile67.5 - 74.5 % 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 oxidising agents.

## 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. 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. Mechanical skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching.

## Eye contact

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

#### **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 numbness 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	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation- Vapour(4 hr)		No data available; calculated ATE20 - 50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
butanone	Dermal	Rabbit	LD50 > 8,050 mg/kg
butanone	Inhalation- Vapour (4 hours)	Rat	LC50 34.5 mg/l
butanone	Ingestion	Rat	LD50 2,737 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
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- Vapour (4 hours)	Rat	LC50 > 14.7 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation- Vapour (4 hours)	Rat	LC50 > 23.3 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation- Vapour (4 hours)	Rat	LC50 > 5.61 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	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		LD50 estimated to be > 5,000 mg/kg
Polychloroprene	Ingestion	Rat	LD50 > 20,000 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
Magnesium oxide	Dermal	Professio nal judgeme	LD50 estimated to be 2,000 - 5,000 mg/kg

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		nt	
Magnesium oxide	Ingestion	Rat	LD50 3,870 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
rosin	Dermal	Rabbit	LD50 > 2,500 mg/kg
rosin	Ingestion	Rat	LD50 7,600 mg/kg
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIENE AND ISOBUTYLENE	Dermal	Rat	LD50 > 2,000 mg/kg
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIENE AND ISOBUTYLENE	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

## **Skin Corrosion/Irritation**

Name	Species	Value
butanone	Rabbit	Minimal irritation
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Rabbit	Irritant
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Rabbit	Irritant
Polychloroprene	Human	No significant irritation
propyl acetate	Rabbit	No significant irritation
Magnesium oxide	Professio	No significant irritation
	nal	
	judgemen	
	t	
zinc oxide	Human	No significant irritation
	and	
	animal	
rosin	Rabbit	No significant irritation
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIENE AND	Rabbit	No significant irritation
ISOBUTYLENE		

**Serious Eye Damage/Irritation** 

Name	Species	Value
lutura.	D-bbit	Common imitant
butanone	Rabbit	Severe irritant
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Rabbit	No significant irritation
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Rabbit	Mild 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	
propyl acetate	Rabbit	Moderate irritant
zinc oxide	Rabbit	Mild irritant
rosin	Rabbit	Mild irritant
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIENE AND	Rabbit	No significant irritation
ISOBUTYLENE		

## Skin Sensitisation

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

	pig	
rosin	Guinea	Sensitising
	pig	
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIENE AND	Guinea	Not classified
ISOBUTYLENE	pig	

**Respiratory Sensitisation** 

Name	Species	Value
rosin	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
butanone	In Vitro	Not mutagenic
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	In Vitro	Not mutagenic
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	In Vitro	Not mutagenic
propyl acetate	In Vitro	Some positive data exist, but the data are not sufficient for classification
Magnesium oxide	In Vitro	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
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIENE AND ISOBUTYLENE	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
butanone	Inhalation	Human	Not carcinogenic
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 specified.	Human and animal	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
butanone	Inhalation	Not classified for development	Rat	LOAEL 8.8 mg/l	during gestation
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
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
propyl acetate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during gestation
zinc oxide	Ingestion	Not classified for reproduction and/or development	Multiple animal species	NOAEL 125 mg/kg/day	premating & during gestation

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P-CRESOL, REACTION PRODUCTS	Ingestion	Not classified for development	Rabbit	NOAEL 15	during
WITH DICYCLOPENTADIENE AND				mg/kg/day	gestation
ISOBUTYLENE					

# Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
butanone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	official classifica tion	NOAEL Not available	
butanone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
butanone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
butanone	Ingestion	liver	Not classified	Rat	NOAEL Not available	not applicable
butanone	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 1,080 mg/kg	not applicable
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	
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	
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
Magnesium oxide	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure** 

	Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Γ	butanone	Dermal	nervous system	Not classified	Guinea	NOAEL Not	31 weeks

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				pig	available	
butanone	Inhalation	liver   kidney and/or bladder   heart   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   hematopoietic system   immune system   muscles	Not classified	Rat	NOAEL 14.7 mg/l	90 days
butanone	Ingestion	liver	Not classified	Rat	NOAEL Not available	7 days
butanone	Ingestion	nervous system	Not classified	Rat	NOAEL 173 mg/kg/day	90 days
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
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
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIENE AND ISOBUTYLENE	Ingestion	endocrine system   blood   liver   eyes	Not classified	Rat	NOAEL 289 mg/kg/day	90 days

**Aspiration Hazard** 

Name	Value		
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Aspiration hazard		
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	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	
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		Data not available or insufficient for classification			N/A
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
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Water flea	Estimated	21 days	NOEL	2.6 mg/l
butanone	78-93-3	Activated sludge	Experimental	12 hours	IC50	1,873 mg/l
butanone	78-93-3	Bacteria	Experimental	16 hours	NOEC	1,150 mg/l
butanone	78-93-3	Fathead minnow	Experimental	96 hours	LC50	2,993 mg/l
butanone	78-93-3	Green algae	Experimental	96 hours	EC50	2,029 mg/l
butanone	78-93-3	Water flea	Experimental	48 hours	EC50	308 mg/l
butanone	78-93-3	Green Algae	Experimental	96 hours	EC10	1,289 mg/l
butanone	78-93-3	Water flea	Experimental	21 days	NOEC	100 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

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Injudections, C6,   931-254-9   Water flea   Estimated   48 hours   EL.50   3 mg/l				1			
Detail   D	Hydrocarbons, C6,	931-254-9	Green algae	Estimated	72 hours	EL50	55 mg/l
Hydrocarbons, C6,							
Southlames, < 5% ps							
hexane		931-254-9	Water flea	Estimated	48 hours	EL50	3 mg/l
Hydrocarbons, C6,	isoalkanes, < 5% n-						
Seal Banes, < 55% n	hexane						
Include   Incl	Hydrocarbons, C6,	931-254-9	Water flea	Estimated	48 hours	EL50	4.5 mg/l
Include   Incl	isoalkanes, < 5% n-						
Hydrocarbons, C6, sonikanes, c5% n-hexane	hexane						
Sizellatines, < 5% n		931-254-9	Water flea	Estimated	48 hours	LC50	3.9 mg/l
Data not available   Data no			, valer freu	Louinatea	10 110 1115	2000	3.5 mg.1
Hydrocarbons, C6,	-						
issalkanes, < 5% n- hexane   Data not available   Data not available   N/A		021 254 0	Painhow trout	Evnorimental	06 hours	1150	\12.4 mg/l
Data not available   Social Reserve		931-234-9	Kambow nout	Experimental	90 Hours	LLSU	/13.4 Hig/1
Hydrocarbons, C6,							
		021 254 0		D			27/4
		931-254-9					N/A
Hydrocarbons, C6, socilkanes, < 5% n - hexane   Hydrocarbons, C6, socilkanes							
				_			
hexane		931-254-9	Green Algae	Estimated	72 hours	NOEL	0.5 mg/l
Hydrocarbons, C6,	isoalkanes, < 5% n-						
	hexane						
Soalkanes, < 5% n-hexane   Hydrocarbons, C6,	Hydrocarbons, C6,	931-254-9	Green Algae	Estimated	72 hours	NOEL	6.3 mg/l
hexane	isoalkanes, < 5% n-						
	hexane						
	Hydrocarbons, C6.	931-254-9	Green Algae	Estimated	72 hours	NOEL	30 mg/l
hexane					1		
Hydrocarbons, C6,							
		031 254 0	Water flea	Estimated	21 days	NOEI	1 mg/l
hexane		931-234-9	water fica	Estimated	21 days	NOEL	1 mg/1
Hydrocarbons, C6,   931-254-9   Water flea   Estimated   21 days   NOEL   2.6 mg/l	-						
		021 254 0	NV 4 CI	F 4: 4 1	21.1	NOEL	2.6 /1
hexane		931-254-9	water flea	Estimated	21 days	NOEL	2.6 mg/I
Propyl acetate   109-60-4   Activated sludge   Experimental   16 hours   IC50   >1,000 mg/l							
Proposition			1				
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  Magnesium oxide 1309-48-4 Data not available or insufficient for classification  Magnesium oxide 1309-48-4 Data not available or insufficient for classification  P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, G8610-51-5 Green Algae Experimental 72 hours NOEC 150.9 mg/l  REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, ReacTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL P	propyl acetate	109-60-4	Activated sludge	Experimental	16 hours	IC50	>1,000 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  Magnesium oxide 1309-48-4 Data not available or insufficient for classification  Magnesium oxide 1309-48-4 Data not available or insufficient for classification  P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, G8610-51-5 Green Algae Experimental 72 hours NOEC 150.9 mg/l  REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, ReacTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL P							
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  Magnesium oxide 1309-48-4 Data not available or insufficient for classification  P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND	propyl acetate	109-60-4	Fathead minnow	Experimental	96 hours	LC50	56 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  Magnesium oxide 1309-48-4 Data not available or insufficient for classification  P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND							
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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  Magnesium oxide 1309-48-4 Data not available or insufficient for classification  P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND							
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Polychloroprene 9010-98-4 Data not available or insufficient for classification  Magnesium oxide 1309-48-4 Data not available or insufficient for classification  P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL NEACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND				1			
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Magnesium oxide 1309-48-4 Data not available or insufficient for classification  P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND	propyr accuate	100 00 .	oreen ringue	z.iperimentar	72 110 415	1,020	05.2 mg/1
Magnesium oxide 1309-48-4 Data not available or insufficient for classification  P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND	Polychloroprana	0010 08 4		Data not available			N/A
Classification   Data not available or insufficient for classification   N/A	1 oryemoroprene	7010-70-4					IVA
Magnesium oxide 1309-48-4 Data not available or insufficient for classification  P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND							
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DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND							
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ISOBUTYLENE P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE NE AND ISOBUTYLENE REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND	DICYCLOPENTADIE						
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REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE PRODUCTS WITH DICYCLOPENTADIE NE AND	ISOBUTYLENE						
REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE PRODUCTS WITH DICYCLOPENTADIE NE AND	P-CRESOL,	68610-51-5	Green Algae	Experimental	72 hours	EC50	>100 mg/l
PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND REACTION REACT	REACTION						
DICYCLOPENTADIE NE AND ISOBUTYLENE  P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND  REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND	PRODUCTS WITH						
NE AND ISOBUTYLENE  P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND  REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND							
ISOBUTYLENE P-CRESOL, 68610-51-5 Rainbow trout Experimental 96 hours LC50 >100 mg/l REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND							
P-CRESOL, 68610-51-5 Rainbow trout Experimental 96 hours LC50 >100 mg/l REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND							
REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND		68610-51-5	Rainbow trout	Experimental	96 hours	I C50	>100 mg/l
PRODUCTS WITH DICYCLOPENTADIE NE AND		00010-31-3	Tamoow Hout	Experimental	70 Hours	LCSU	100 1118/1
DICYCLOPENTADIE NE AND							
NE AND							
ISUDU I I LEINE	ISOBUTYLENE	I	1	1	<u> </u>	1	1

P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE	68610-51-5	Water flea	Experimental	48 hours	EC50	>100 mg/l
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE	68610-51-5	Fathead minnow	Experimental	34 days	NOEL	100 mg/l
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE	68610-51-5	Green algae	Experimental	72 hours	NOEC	100 mg/l
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE	68610-51-5	Water flea	Experimental	21 days	EC10	<1 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
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

# 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
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	Data not availbl-			N/A	
alkanes, isoalkanes, cyclics		insufficient				
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 %	OECD 301F - Manometric
alkanes, isoalkanes, cyclics		Biodegradation			BOD/ThBOD	respirometry
butanone	78-93-3	Experimental	28 days	BOD	98 %	OECD 301D - Closed bottle
		Biodegradation			BOD/ThBOD	test
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	Data not availbl-			N/A	
isoalkanes, < 5% n- hexane		insufficient				
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 %	OECD 301F - Manometric

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isoalkanes, < 5% n- hexane		Biodegradation			BOD/ThBOD	respirometry
propyl acetate	109-60-4	Experimental Biodegradation	14 days	BOD	81 % BOD/ThBOD	OECD 301C - MITI test (I)
Polychloroprene	9010-98-4	Data not availbl- insufficient			N/A	
Magnesium oxide	1309-48-4	Data not availbl- insufficient			N/A	
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIENE AND ISOBUTYLENE	68610-51-5	Experimental Biodegradation	28 days	CO2 evolution	1 % weight	OECD 301B - Modified sturm or CO2
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	

## 12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
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	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Estimated Bioconcentration		Log Kow	3.6	Non-standard method
butanone	78-93-3	Experimental Bioconcentration		Log Kow	0.29	Non-standard method
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	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Estimated Bioconcentration		Log Kow	3.6	Non-standard method
propyl acetate	109-60-4	Experimental Bioconcentration		Log Kow	1.4	Non-standard method
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
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIENE AND ISOBUTYLENE	68610-51-5	Estimated Bioconcentration		Bioaccumulation factor	≤55	Estimated: Bioconcentration factor
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

# 12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
P-CRESOL, REACTION	68610-51-5	Experimental	Koc	>427000 l/kg	OECD 121 Estim. of Koc by
PRODUCTS WITH		Mobility in Soil			HPLC

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2MTM DLL.	er Adhesive 1300L TF		
13Wi-M Kubbe	ar Adnesive 15001/ 1 r		

DICYCLOPENTADIENE			
AND ISOBUTYLENE			

#### 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	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	II	II	II

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 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
<b>Emergency Temperature</b>	No data available.	No data available.	No data available.
ADR Tunnel Code	(E)	Not applicable.	Not applicable.
ADR Classification Code	F1	Not applicable.	Not applicable.
ADR Transport Category	2	Not applicable.	Not applicable.
ADR Multiplier	0	0	0
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

IngredientCAS NbrClassificationRegulationPolychloroprene9010-98-4Gr. 3: Not classifiableInternational Agency<br/>for Research on Cancer

## Global inventory status

Contact 3M for more information.

## 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.
H361d	Suspected of damaging the unborn child.
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.
H413	May cause long lasting harmful effects to aquatic life.

#### **Revision information:**

EU Section 09: pH information information was modified.

CLP: Ingredient table information was modified.

Section 3: Composition/Information of ingredients table information was modified.

Section 04: First Aid - Symptoms and Effects (CLP) information was added.

Section 04: Information on toxicological effects information was modified.

Section 5: Hazardous combustion products table information was modified.

Section 8: Occupational exposure limit table information was modified.

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 13: Standard Phrase Category Waste GHS information was modified.

Section 14 Proper Shipping Name information was modified.

Section 14 Transport Not Permitted – Main Heading information was deleted.

Section 14 Transport Not Permitted – Regulation Data information was deleted.

## Annex

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 Operating Conditions	Physical state:Liquid.
Operating Conditions	r nysicai state: Liquid.

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	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	Hydrocarbons, C6, isoalkanes, < 5% n- hexane; EC No. 931-254-9; Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; EC No. 927-510-4;
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;

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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	butanone; EC No. 201-159-0; CAS Nbr 78-93-3;
Exposure Scenario Name	Formulation
Lifecycle Stage	Use at industrial sites
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	Transfer of substances/mixtures into small containers e.g. tubes, bottles or small reservoirs. Transfers with dedicated controls, including loading, filling, dumping, bagging. Transfers without dedicated controls, including loading, filling, dumping, bagging.
2. Operational conditions and risk mana	ngement measures
Operating Conditions	Physical state:Liquid. General operating conditions: 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;  Local exhaust ventilation;  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	1
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	Hydrocarbons, C6, isoalkanes, < 5% n- hexane;
	EC No. 931-254-9;
	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics;
	EC No. 927-510-4;
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 management measures	
Operating Conditions	Physical state:Liquid.
	General operating conditions:

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	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;
	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	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 ERC 06d -Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article)
Processes, tasks and activities covered	Spraying of substances/mixtures.
2. Operational conditions and risk management 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; 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	zinc oxide;

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	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 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	Application of product with a roller or brush.
2. Operational conditions and risk mana	ngement 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;
	Incinerate in a permitted hazardous waste incinerator;
	Send to a municipal sewage treatment plant;
3. Prediction of exposure	1
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	butanone; EC No. 201-159-0; CAS Nbr 78-93-3;
Exposure Scenario Name	Industrial Use of Coatings
Lifecycle Stage	Use at industrial sites
Contributing activities	PROC 05 -Mixing or blending in batch processes 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. Mixing operations (open systems). Transfer of substances/mixtures into small containers e.g. tubes, bottles or small reservoirs.
2. Operational conditions and risk mana	gement measures
Operating Conditions	Physical state:Liquid. General operating conditions: Duration of exposure per day at workplace [for one worker]: 8 hours/day;  Task: PROC07; Air exchange rate:: 10 - 15;
Risk management measures	Under the operational conditions described above the following risk management measures apply:

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	General risk management measures:
	Human health:
	Goggles - Chemical resistant;
	Environmental:
	None needed;
	The following task-specific risk management measures apply in addition to those
	listed above:
	Task: Transferring Material;
	Human Health;
	Half-facepiece air-purifying respirator;
	Tran-racepiece an-purnying respirator,
	Task: PROC05;
	· · · · · · · · · · · · · · · · · · ·
	Human Health;
	Local exhaust ventilation;
	Task: PROC07;
	Human Health;
	Half-facepiece air-purifying respirator;
	Task: PROC10;
	Human Health;
	Provide extract ventilation to points where emissions occur;
Waste management measures	No use-specific waste management measures are required for this product. Refer
vi aste management measures	to Section 13 of main SDS for disposal instructions:
2. D P	to section 13 of main 3D3 for disposal histractions.
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.

4. Tital	
1. Title Substance identification	Hydrocarbons, C6, isoalkanes, < 5% n- hexane; EC No. 931-254-9; Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; EC No. 927-510-4;
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)
Processes, tasks and activities covered	Spraying of substances/mixtures.
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; 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;
Waste management measures	Do not release to waterways or sewers;
3. Prediction of exposure	

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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	Hydrocarbons, C6, isoalkanes, < 5% n- hexane; EC No. 931-254-9; Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; EC No. 927-510-4;
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)
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; 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;
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.

4 mta		
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 11 -Non industrial spraying	
	ERC 08c -Widespread use leading to inclusion into/onto article (indoor)	
Processes, tasks and activities covered	Spraying of substances/mixtures.	
2. Operational conditions and risk mana	2. Operational conditions and risk management 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;	
	, jour,	
Risk management measures	Under the operational conditions described above the following risk management	
	measures apply:	
	General risk management measures:	
	Human health:	
	Goggles - Chemical resistant;	

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	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		
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 13 -Treatment of articles by dipping and pouring ERC 08c -Widespread use leading to inclusion into/onto article (indoor)	
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: 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	
Substance identification	butanone;
	EC No. 201-159-0;
	CAS Nbr 78-93-3;
Exposure Scenario Name	Professional Use of Coatings
Lifecycle Stage	Widespread use by professional workers
Contributing activities	PROC 05 -Mixing or blending in batch processes
	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

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	PROC 10 -Roller application or brushing
	ERC 08a -Widespread use of non-reactive processing aid (no inclusion into or
	onto article, indoor)
Processes, tasks and activities covered	Application of product. Mixing operations (open systems). Transfer of
	substances/mixtures into small containers e.g. tubes, bottles or small reservoirs.
2. Operational conditions and risk mana	gement measures
<b>Operating Conditions</b>	Physical state:Liquid.
	General operating conditions:
	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;
	Provide a good standard of general ventilation (not less than 3 to 5 air changes per
	hour);
	Environmental:
	None needed;
	;
	The following task-specific risk management measures apply in addition to those
	listed above:
	Task: Transferring Material;
	Human Health;
	Half-facepiece air-purifying respirator;
	Task: Mixing;
	Human Health;
XXI 4	Half-facepiece air-purifying respirator;
Waste management measures	No use-specific waste management measures are required for this product. Refer
2 P 1' 4' 6	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.

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