

# 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>TM</sup> Contact Adhesive 1357

#### **Product Identification Numbers**

UU-0015-0949-4

7100038272

#### 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 Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18.

Telephone: +353 1 280 3555 E Mail: tox.uk@mmm.com Website: www.3M.com

### 1.4. Emergency telephone number

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

### **SECTION 2: Hazard identification**

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

CLP REGULATION (EC) No 1272/2008

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

The aspiration hazard classification is not required 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

Reproductive Toxicity, Category 2 - Repr. 2; H361fd

Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373 Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336 Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

#### 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

#### SIGNAL WORD

DANGER.

#### Symbols

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

#### **Pictograms**









#### **Ingredients:**

Ingredient	CAS Nbr	EC No.	% by Wt
Hydrocarbons, C6, n-alkanes, isoalkanes, cyclics hexane rich	, n-	925-292-5	10 - 30
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane		924-168-8	10 - 30
toluene	108-88-3	203-625-9	5 - 10

#### **HAZARD STATEMENTS:**

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.
H319 Causes serious eye irritation.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure: nervous system.

H411 Toxic to aquatic life with long lasting effects.

#### PRECAUTIONARY STATEMENTS

#### **Prevention:**

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

P260E Do not breathe vapour or spray.
P273 Avoid release to the environment.

P280K Wear protective gloves and respiratory protection.

**Response:** 

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

present and easy to do. Continue rinsing.

P370 + P378

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

#### SUPPLEMENTAL INFORMATION:

**Supplemental Hazard Statements:** 

EUH208

Contains rosin. May produce an allergic reaction.

8% of the mixture consists of components of unknown acute oral toxicity.

Contains 8% 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]
Polychloroprene	(CAS-No.) 9010-98-4	10 - 30	Substance not classified as hazardous
Hydrocarbons, C6, n-alkanes, isoalkanes,	(EC-No.) 925-292-5	10 - 30	Aquatic Chronic 2, H411
cyclics, n-hexane rich			Flam. Liq. 2, H225
			Asp. Tox. 1, H304
			Skin Irrit. 2, H315
			Repr. 2, H361f STOT SE 3, H336
			STOT SE 3, H330 STOT RE 2, H373
acetone	(CAS-No.) 67-64-1	10 - 30	Flam. Liq. 2, H225
dectone	(EC-No.) 200-662-2	10 50	Eye Irrit. 2, H319
	(REACH-No.) 01-		STOT SE 3, H336
	2119471330-49		EUH066
Hydrocarbons, C6-C7, n-alkanes,	(EC-No.) 924-168-8	10 - 30	Aquatic Chronic 2, H411
isoalkanes, cyclics, >5% n-hexane	(REACH-No.) 01-		Flam. Liq. 2, H225
	2119472127-39		Asp. Tox. 1, H304
			Skin Irrit. 2, H315
			Repr. 2, H361f
			STOT SE 3, H336
hutanana	(CAS No.) 79 02 2	7 - 13	STOT RE 2, H373 Flam. Liq. 2, H225
butanone	(CAS-No.) 78-93-3 (EC-No.) 201-159-0	/ - 13	Eye Irrit. 2, H319
	(REACH-No.) 01-		STOT SE 3, H336
	2119457290-43		EUH066
P-Tertiobutylphenol Formaldehyde Resin		1 - 10	Substance not classified as hazardous
Magnesium oxide	(CAS-No.) 1309-48-4	1 - 10	Substance with a national occupational
	(EC-No.) 215-171-9		exposure limit

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toluene	(CAS-No.) 108-88-3 (EC-No.) 203-625-9 (REACH-No.) 01- 2119471310-51	5 - 10	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Aquatic Chronic 3, H412
zinc oxide	(CAS-No.) 1314-13-2 (EC-No.) 215-222-5 (REACH-No.) 01- 2119463881-32	< 0.75	Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1
rosin	(CAS-No.) 8050-09-7 (EC-No.) 232-475-7	< 0.5	Skin Sens. 1B, H317
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIENE AND ISOBUTYLENE	(CAS-No.) 68610-51-5 (EC-No.) 271-867-2 (REACH-No.) 01- 2119496062-39	< 0.3	Aquatic Chronic 4, H413 Repr. 2, H361d

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). Target organ effects. See Section 11 for additional details.

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

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

#### 5.1. Extinguishing media

In case of fire: Use a fire fighting agent suitable for 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**

<u>Substance</u> <u>Condition</u>

Carbon monoxide During combustion.
Carbon dioxide. 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. 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
toluene	108-88-3	Ireland OELs	TWA(8 hours):192 mg/m3(50	SKIN
			ppm);TWA(8 hours):50	
			ppm(192 mg/m3);STEL(15	
			minutes):384 mg/m3(100	
			ppm);STEL(15 minutes):100	
			ppm(384 mg/m3)	
Magnesium oxide	1309-48-4	Ireland OELs	TWA(Total inhalable dust)(8	
			hours):10 mg/m3;TWA(as	
			respirable dust)(8 hours):4	
			mg/m3;TWA(as fume)(8	
			hours):5 mg/m3;STEL(as	
			fume)(15 minutes):10 mg/m3	
zinc oxide	1314-13-2	Ireland OELs	TWA(Respirable fraction	
			& amp; fume)(8 hours):2	
			mg/m3;STEL(Respirable	
			fraction & to (15)	
	67.64.1	I 1 10FI	minutes):10 mg/m3	
acetone	67-64-1	Ireland OELs	TWA(8 hours):1210	
			mg/m3(500 ppm);TWA(8	
1	70.02.2	I I LOFI	hours):500 ppm(1210 mg/m3)	CKDI
butanone	78-93-3	Ireland OELs	TWA(8 hours):600 mg/m3(200	SKIN
			ppm);TWA(8 hours):200	
			ppm(600 mg/m3);STEL(15	
			minutes):900 mg/m3(300	
			ppm);STEL(15 minutes):300	
ROSIN CORE SOLDER	8050-09-7	Ireland OELs	ppm(900 mg/m3)	AID total requireble
	8030-09-7	Heland OELS	TWA(8 hours):0.05	AIR, total respirable
PYROLYSIS PRODUCTS			mg/m3;STEL(15 minutes):0.15 mg/m3	
Ireland OELs : Ireland. OELs			1118/1113	
TWA: Time-Weighted-Average				

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	Population	Human exposure	DNEL
	Product		pattern	

acetone	Worker	Dermal, Long-term	186 mg/kg bw/d
		exposure (8 hours),	
		Systemic effects	
acetone	Worker	Inhalation, Long-term	1,210 mg/m <sup>3</sup>
		exposure (8 hours),	
		Systemic effects	
acetone	Worker	Inhalation, Short-term	2,420 mg/m <sup>3</sup>
		exposure, Local effects	

Predicted no effect concentrations (PNEC)

Ingredient	Degradation Product	Compartment	PNEC
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 Indust. Inspect./Ministry (IE)

#### 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:

Full face shield.

Indirect vented goggles.

Applicable Norms/Standards

Use eye/face protection conforming to EN 166

#### Skin/hand protection

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

MaterialThickness (mm)Breakthrough TimePolymer laminate>0.30=>8 hours

The glove data presented are based on the substance driving dermal toxicity and the conditions present at the time of testing. Breakthrough time may be altered when the glove is subjected to use conditions that place additional stress on the glove.

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:Syrup (see above)ColourBrown, GreenOdorSolvent

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

**Boiling point/boiling range** >=55.8 °C [Details:Starting point for acetone]

Flammability (solid, gas)

Flammable Limits(LEL)

Flammable Limits(UEL)

No data available.

No data available.

Flash point >=-35 °C [Test Method:Closed Cup] [Details:Naphtha

(petroleum), hydrotreated light]

Autoignition temperatureNo data available.Decomposition temperatureNo data available.

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

Kinematic Viscosity318 mm²/secWater solubilityNo data available.Solubility- non-waterNo data available.Partition coefficient: n-octanol/waterNo data available.Vapour pressureNo data available.DensityNo data available.

Relative density 0.786 - 0.834 [Ref Std:WATER=1]

**Relative Vapour Density** *No data available.* 

#### 9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds75 - 80 % weightEvaporation rateNo data available.Percent volatile75 - 80 % weight

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# **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

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.

#### Eve 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:

Ocular effects: Signs/symptoms may include blurred or significantly impaired vision. Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears. Peripheral neuropathy: Signs/symptoms may include tingling or numbness of the extremities, incoordination, weakness of the hands and feet, tremors and muscle atrophy. Olfactory effects: Signs/symptoms may include decreased ability to detect odours and complete loss of smell. Neurological effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate.

#### Reproductive/Developmental Toxicity:

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

#### **Toxicological Data**

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

**Acute Toxicity** 

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation- Vapour(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	Dermal	Rat	LD50 > 2,800 mg/kg
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	Inhalation- Vapour (4 hours)	Rat	LC50 > 25.2 mg/l
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	Ingestion	Rat	LD50 > 5,840 mg/kg
Hydrocarbons, C6, n-alkanes, isoalkanes, cyclics, n-hexane rich	Dermal	Rabbit	LD50 = 3,350  mg/kg
Hydrocarbons, C6, n-alkanes, isoalkanes, cyclics, n-hexane rich	Inhalation- Vapour (4 hours)	Rat	LC50 = 259 mg/l
Hydrocarbons, C6, n-alkanes, isoalkanes, cyclics, n-hexane rich	Ingestion	Rat	LD50 > 16,750 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
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
Polychloroprene	Dermal		LD50 estimated to be > 5,000 mg/kg
Polychloroprene	Ingestion	Rat	LD50 > 20,000 mg/kg
toluene	Dermal	Rat	LD50 12,000 mg/kg
toluene	Inhalation- Vapour (4 hours)	Rat	LC50 30 mg/l
toluene	Ingestion	Rat	LD50 5,550 mg/kg
Magnesium oxide	Dermal	Professio nal judgeme	LD50 estimated to be 2,000 - 5,000 mg/kg

		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
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	Rabbit	Irritant
Hydrocarbons, C6, n-alkanes, isoalkanes, cyclics, n-hexane rich	Rabbit	Irritant
acetone	Mouse	Minimal irritation
butanone	Rabbit	Minimal irritation
Polychloroprene	Human	No significant irritation
toluene	Rabbit	Irritant
Magnesium oxide	Professio nal judgemen t	No significant irritation
zinc oxide	Human and animal	No significant irritation
rosin	Rabbit	No significant irritation
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIENE AND ISOBUTYLENE	Rabbit	No significant irritation

**Serious Eye Damage/Irritation** 

Name	Species	Value
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	Rabbit	Mild irritant
Hydrocarbons, C6, n-alkanes, isoalkanes, cyclics, n-hexane rich	Rabbit	Mild irritant
acetone	Rabbit	Severe irritant
butanone	Rabbit	Severe irritant
Polychloroprene	Professio	No significant irritation
	nal	
	judgemen	
	t	
toluene	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**

Name	Species	Value
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	Guinea	Not classified
	pig	
toluene	Guinea	Not classified
	pig	
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
Hydrocarbons, C6, n-alkanes, isoalkanes, cyclics, n-hexane rich	In Vitro	Not mutagenic
acetone	In vivo	Not mutagenic
acetone	In Vitro	Some positive data exist, but the data are not sufficient for classification
butanone	In Vitro	Not mutagenic
toluene	In Vitro	Not mutagenic
toluene	In vivo	Not mutagenic
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
acetone	Not	Multiple	Not carcinogenic
	specified.	animal	
		species	
butanone	Inhalation	Human	Not carcinogenic
toluene	Dermal	Mouse	Some positive data exist, but the data are not
			sufficient for classification
toluene	Ingestion	Rat	Some positive data exist, but the data are not
			sufficient for classification
toluene	Inhalation	Mouse	Some positive data exist, but the data are not
			sufficient for classification
Magnesium oxide	Not	Human	Some positive data exist, but the data are not
	specified.	and	sufficient for classification
		animal	

# Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	Ingestion	Toxic to male reproduction	similar compoun ds	NOAEL Not available	not available
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	Inhalation	Toxic to male reproduction	similar compoun ds	NOAEL Not available	not available
Hydrocarbons, C6, n-alkanes, isoalkanes, cyclics, n-hexane rich	Not specified.	Toxic to male reproduction	similar compoun ds	NOAEL Not available	
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
butanone	Inhalation	Not classified for development	Rat	LOAEL 8.8 mg/l	during gestation

toluene	Inhalation	Not classified for female reproduction	Human	NOAEL Not	occupational
toluene	Inhalation	Not classified for male reproduction	Rat	available NOAEL 2.3 mg/l	exposure 1 generation
toluene	Ingestion	Toxic to development	Rat	LOAEL 520 mg/kg/day	during gestation
toluene	Inhalation	Toxic to development	Human	NOAEL Not available	poisoning and/or abuse
zinc oxide	Ingestion	Not classified for reproduction and/or development	Multiple animal species	NOAEL 125 mg/kg/day	premating & during gestation
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIENE AND ISOBUTYLENE	Ingestion	Not classified for development	Rabbit	NOAEL 15 mg/kg/day	during gestation

# Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Hydrocarbons, C6-C7, n- alkanes, isoalkanes, cyclics, >5% n-hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	similar compoun ds	NOAEL Not available	not available
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	similar compoun ds	NOAEL Not available	not available
Hydrocarbons, C6, n- alkanes, isoalkanes, cyclics, n-hexane rich	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
Hydrocarbons, C6, n- alkanes, isoalkanes, cyclics, n-hexane rich	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Professio nal judgeme nt	NOAEL Not available	
Hydrocarbons, C6, n- alkanes, isoalkanes, cyclics, n-hexane rich	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
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
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
toluene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
toluene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for	Human	NOAEL Not available	

			classification			
toluene	Inhalation	immune system	Not classified	Mouse	NOAEL	3 hours
					0.004 mg/l	
toluene	Ingestion	central nervous	May cause drowsiness or	Human	NOAEL Not	poisoning
		system depression	dizziness		available	and/or abuse
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
Hydrocarbons, C6-C7, n- alkanes, isoalkanes, cyclics, >5% n-hexane	Inhalation	peripheral nervous system	May cause damage to organs though prolonged or repeated exposure	similar compoun ds	NOAEL Not available	not available
Hydrocarbons, C6, n- alkanes, isoalkanes, cyclics, n-hexane rich	Inhalation	peripheral nervous system	May cause damage to organs though prolonged or repeated exposure	similar compoun ds	NOAEL Not available	
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
butanone	Dermal	nervous system	Not classified	Guinea pig	NOAEL Not available	31 weeks
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
toluene	Inhalation	auditory system   eyes   olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
toluene	Inhalation	nervous system	May cause damage to organs	Human	NOAEL Not	poisoning

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			though prolonged or repeated exposure		available	and/or abuse
toluene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2.3 mg/l	15 months
toluene	Inhalation	heart   liver   kidney and/or bladder	Not classified	Rat	NOAEL 11.3 mg/l	15 weeks
toluene	Inhalation	endocrine system	Not classified	Rat	NOAEL 1.1 mg/l	4 weeks
toluene	Inhalation	immune system	Not classified	Mouse	NOAEL Not available	20 days
toluene	Inhalation	bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 1.1 mg/l	8 weeks
toluene	Inhalation	hematopoietic system   vascular system	Not classified	Human	NOAEL Not available	occupational exposure
toluene	Inhalation	gastrointestinal tract	Not classified	Multiple animal species	NOAEL 11.3 mg/l	15 weeks
toluene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 625 mg/kg/day	13 weeks
toluene	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
toluene	Ingestion	liver   kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
toluene	Ingestion	hematopoietic system	Not classified	Mouse	NOAEL 600 mg/kg/day	14 days
toluene	Ingestion	endocrine system	Not classified	Mouse	NOAEL 105 mg/kg/day	28 days
toluene	Ingestion	immune system	Not classified	Mouse	NOAEL 105 mg/kg/day	4 weeks
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, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	Aspiration hazard
Hydrocarbons, C6, n-alkanes, isoalkanes, cyclics, n-hexane rich	Aspiration hazard
toluene	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	
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, C6, n- alkanes, isoalkanes, cyclics, n-hexane rich	925-292-5	Green algae	Estimated	72 hours	EL50	55 mg/l
Hydrocarbons, C6, n- alkanes, isoalkanes, cyclics, n-hexane rich	925-292-5	Water flea	Estimated	48 hours	LC50	3.9 mg/l
Hydrocarbons, C6, n- alkanes, isoalkanes, cyclics, n-hexane rich	925-292-5	Green algae	Estimated	72 hours	NOEL	30 mg/l
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	924-168-8	Green algae	Estimated	72 hours	EL50	30-100 mg/l
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	924-168-8	Rainbow trout	Estimated	96 hours	LL50	11.4 mg/l
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	924-168-8	Water flea	Estimated	48 hours	EL50	3 mg/l
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	924-168-8	Green algae	Estimated	72 hours	NOEL	3 mg/l
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	924-168-8	Water flea	Estimated	21 days	NOEC	0.17 mg/l
Polychloroprene	9010-98-4	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
butanone	78-93-3	Fathead minnow	Experimental	96 hours	LC50	2,993 mg/l
butanone	78-93-3	Green algae	Experimental	96 hours	ErC50	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	ErC10	1,289 mg/l
butanone	78-93-3	Water flea	Experimental	21 days	NOEC	100 mg/l
butanone	78-93-3	Bacteria	Experimental	16 hours	LOEC	1,150 mg/l
Magnesium oxide	1309-48-4	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
toluene	108-88-3	Coho Salmon	Experimental	96 hours	LC50	5.5 mg/l
toluene	108-88-3	Grass Shrimp	Experimental	96 hours	LC50	9.5 mg/l

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toluene	108-88-3	Green algae	Experimental	72 hours	EC50	12.5 mg/l
toluene	108-88-3	Leopard frog	Experimental	9 days	LC50	0.39 mg/l
toluene	108-88-3	Pink Salmon	Experimental	96 hours	LC50	6.41 mg/l
toluene	108-88-3	Water flea	Experimental	48 hours	EC50	3.78 mg/l
toluene	108-88-3	Coho Salmon	Experimental	40 days	NOEC	1.39 mg/l
toluene	108-88-3	Diatom	Experimental	72 hours	NOEC	10 mg/l
toluene	108-88-3	Water flea	Experimental	7 days	NOEC	0.74 mg/l
toluene	108-88-3	Activated sludge	Experimental	12 hours	IC50	292 mg/l
toluene	108-88-3	Bacteria	Experimental	16 hours	NOEC	29 mg/l
toluene	108-88-3	Bacteria	Experimental	24 hours	EC50	84 mg/l
toluene	108-88-3	Redworm	Experimental	28 days	LC50	>150 mg per kg of bodyweight
toluene	108-88-3	Soil microbes	Experimental	28 days	NOEC	<26 mg/kg (Dry Weight)
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	N/A	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
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE	68610-51-5	Bacteria	Experimental	17 hours	NOEC	150.9 mg/l
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE	68610-51-5	Green algae	Experimental	72 hours	EC50	>100 mg/l
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE NE AND ISOBUTYLENE	68610-51-5	Rainbow trout	Experimental	96 hours	LC50	>100 mg/l
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIE	68610-51-5	Water flea	Experimental	48 hours	EC50	>100 mg/l

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

# 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
acetone	67-64-1	Experimental Biodegradation	28 days	BOD	78 %BOD/ThO D	OECD 301D - Closed bottle test
acetone	67-64-1	Experimental Photolysis		Photolytic half-life (in air)	147 days (t 1/2)	
Hydrocarbons, C6, n- alkanes, isoalkanes, cyclics, n-hexane rich	925-292-5	Estimated Biodegradation	28 days	BOD	98 %BOD/ThO D	OECD 301F - Manometric respirometry
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	924-168-8	Estimated Biodegradation	28 days	BOD	98 %BOD/ThO D	OECD 301F - Manometric respirometry
Polychloroprene	9010-98-4	Data not availbl- insufficient	N/A	N/A	N/A	N/A
butanone	78-93-3	Experimental Biodegradation	28 days	BOD	98 %BOD/ThO D	OECD 301D - Closed bottle test
Magnesium oxide	1309-48-4	Data not availbl- insufficient	N/A	N/A	N/A	N/A
toluene	108-88-3	Experimental Biodegradation	20 days	BOD	80 %BOD/ThO D	APHA Std Meth Water/Wastewater
toluene	108-88-3	Experimental Photolysis		Photolytic half-life (in air)	5.2 days (t 1/2)	
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
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

# 12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
acetone	67-64-1	Experimental BCF -		Bioaccumulation	0.65	
		Other		factor		
acetone	67-64-1	Experimental		Log Kow	-0.24	
		Bioconcentration				
Hydrocarbons, C6, n-	925-292-5	Data not available	N/A	N/A	N/A	N/A
alkanes, isoalkanes,		or insufficient for				
cyclics, n-hexane rich		classification				
Hydrocarbons, C6-C7, n-	924-168-8	Data not available	N/A	N/A	N/A	N/A
alkanes, isoalkanes,		or insufficient for				

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cyclics, >5% n-hexane		classification				
Polychloroprene	9010-98-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
butanone	78-93-3	Experimental Bioconcentration		Log Kow	0.3	OECD 117 log Kow HPLC method
Magnesium oxide	1309-48-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
toluene	108-88-3	Experimental BCF - Other	72 hours	Bioaccumulation factor	90	
toluene	108-88-3	Experimental Bioconcentration		Log Kow	2.73	
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	
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIENE AND ISOBUTYLENE	68610-51-5	Modeled Bioconcentration		Bioaccumulation factor	≤55	Catalogic <sup>TM</sup>

#### 12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
acetone	67-64-1	Modeled Mobility in Soil	Koc	9.7 l/kg	Episuite <sup>TM</sup>
toluene	108-88-3	Experimental Mobility in Soil	Koc	37-160 l/kg	
P-CRESOL, REACTION PRODUCTS WITH DICYCLOPENTADIENE AND ISOBUTYLENE	68610-51-5	Experimental Mobility in Soil	Koc	>427000 l/kg	OECD 121 Estim. of Koc by HPLC

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

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

### 12.6. 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. 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 (ZINC OXIDE)
14.3 Transport hazard class(es)	3	3	3
14.4 Packing group	14.4 Packing group II		II
14.5 Environmental hazards	Environmentally Hazardous	Not applicable	Marine Pollutant
14.6 Special precautions for user		Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Marine Transport in bulk according to IMO instruments	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
<b>Emergency Temperature</b>	No data available.	No data available.	No data available.
ADR Classification Code	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

<u>Ingredient</u> <u>CAS Nbr</u> <u>Classification</u> <u>Regulation</u>

Polychloroprene 9010-98-4 Gr. 3: Not classifiable International Agency for Research on Cancer toluene 108-88-3 Gr. 3: Not classifiable International Agency for Research on Cancer

#### Restrictions on the manufacture, placing on the market and use:

The following substance(s) contained in this product is/are subject through Annex XVII of REACH regulation to restrictions on the manufacture, placing on the market and use when present in certain dangerous substances, mixtures and articles. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

IngredientCAS Nbrtoluene108-88-3

Restriction status: listed in REACH Annex XVII

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

#### Regulation (EU) 2019/1148 (marketing and use of explosive precursors)

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. Please see your local legislation.

#### 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
zinc oxide	1314-13-2	100	200
acetone	67-64-1	10	50
butanone	78-93-3	10	50
toluene	108-88-3	10	50

#### 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.

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

#### List of relevant H statements

ETHIOCO

EUNUUU	Repeated exposure may cause skin dryness of 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.
	•

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H361d	Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure: nervous system.
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.

Label: CLP Classification information was modified.

Label: CLP Percent Unknown information was added.

Section 8: Occupational exposure limit table information was modified.

OEL Reg Agency Desc information was modified.

Section 9: Vapour density value 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: Persistence and Degradability information information was modified.

Section 12:Bioccumulative potential information 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 Transport Category – Main Heading information was deleted.

Section 14 Transport Category – Regulation Data information was deleted.

Section 14 Marine transport in bulk according to IMO instruments - Main Heading information was modified.

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: Seveso Substance Text information was added.

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

#### Annex

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	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 with dedicated controls, including loading, filling, dumping, bagging.

2. Operational conditions and risk man	agement 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; 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	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 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]: 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	
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 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 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]: 8 hours/day;	
Risk management measures	Under the operational conditions described above the following risk management	
G	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	
J	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	
<u> </u>	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 mana	ngement 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 mana		
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.	

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