

### 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 DisplayMount Spray Adhesive

#### **Product Identification Numbers**

YP-2080-6067-0

7000116738

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

#### **Identified uses**

Adhesive aerosol.

#### 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 because the product is an aerosol.

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#### **CLASSIFICATION:**

Aerosol, Category 1 - Aerosol 1; H222, H229

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

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

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

Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

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) |

#### **Pictograms**





#### **Ingredients:**

Ingredient	CAS Nbr	EC No.	% by Wt
acetone	67-64-1	200-662-2	10 - 30
Hydrocarbons, C7, n-alkanes, isoalkanes, cy	relies	927-510-4	7 - 13
Hydrocarbons, C6, isoalkanes, < 5% n- hexa	ane	931-254-9	1 - 10

#### **HAZARD STATEMENTS:**

H222 Extremely flammable aerosol.

H229 Pressurised container: may burst if heated.

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

#### PRECAUTIONARY STATEMENTS

General:

P102 Keep out of reach of children.

**Prevention:** 

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

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

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

**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.

Storage:

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

Disposal:

P501 Dispose of contents/container in accordance with applicable local/regional/national/international

regulations.

#### 2.3. Other hazards

May displace oxygen and cause rapid suffocation.

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

### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Ingredient	Identifier(s)	0/0	Classification according to Regulation (EC) No. 1272/2008 [CLP]
propane	(CAS-No.) 74-98-6 (EC-No.) 200-827-9	10 - 30	Flam. Gas 1A, H220 Liquified gas, H280 Nota U
acetone	(CAS-No.) 67-64-1 (EC-No.) 200-662-2	10 - 30	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane	(CAS-No.) 31393-98-3	7 - 13	Aquatic Chronic 4, H413
Butadiene-styrene-meta-divinylbenzene polymer	(CAS-No.) 26471-45-4	7 - 13	Substance not classified as hazardous
butane	(CAS-No.) 106-97-8 (EC-No.) 203-448-7	< 13	Flam. Gas 1A, H220 Liquified gas, H280 Nota C,U
dimethyl ether	(CAS-No.) 115-10-6 (EC-No.) 204-065-8 (REACH-No.) 01- 2119472128-37	7 - 13	Flam. Gas 1A, H220 Liquified gas, H280 Nota U
isobutane	(CAS-No.) 75-28-5 (EC-No.) 200-857-2	< 13	Flam. Gas 1A, H220 Liquified gas, H280 Nota C,U
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	(EC-No.) 927-510-4 (REACH-No.) 01- 2119475515-33	7 - 13	Aquatic Chronic 2, H411 Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336
Glycerol ester of hydrogenated rosin	(CAS-No.) 65997-13-9 (EC-No.) 266-042-9	1 - 10	Substance with a national occupational exposure limit
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	(EC-No.) 931-254-9	1 - 10	Aquatic Chronic 2, H411 Flam. Liq. 2, H225

Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	(EC-No.) 920-901-0 (REACH-No.) 01- 2119456810-40	1 - 5	Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066
pentane	(CAS-No.) 109-66-0 (EC-No.) 203-692-4 (REACH-No.) 01- 2119459286-30	1 - 5	Flam. Liq. 2, H225 Asp. Tox. 1, H304 STOT SE 3, H336 EUH066 Aquatic Chronic 2, H411 Nota C
isopentane	(CAS-No.) 78-78-4 (EC-No.) 201-142-8	1 - 3	Flam. Liq. 1, H224 Asp. Tox. 1, H304 STOT SE 3, H336 EUH066 Aquatic Chronic 2, H411

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. 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

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

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

#### 5.1. Extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

#### 5.2. Special hazards arising from the substance or mixture

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

#### **Hazardous Decomposition or By-Products**

<b>Substance</b>	<b>Condition</b>
Aldehydes.	During combustion.
Hydrocarbons.	During combustion.
formaldehyde	During combustion.
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.

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

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Cover spill area with a fire-extinguishing foam. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

#### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Do not use in a confined area with minimal air exchange. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (eg. gloves, respirators...) as required.

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

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

#### 7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

#### Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
butane	106-97-8	UK HSC	TWA:1450 mg/m³(600 ppm);STEL:1810 mg/m³(750 ppm)	
pentane	109-66-0	UK HSC	TWA:1800 mg/m <sup>3</sup> (600 ppm)	
dimethyl ether	115-10-6	UK HSC	TWA:766 mg/m³(400 ppm);STEL:958 mg/m³(500 ppm)	
Rosin	65997-13-9	UK HSC	TWA(as fume):0.05 mg/m³;STEL(as fume):0.15 mg/m³	Respiratory Sensitizer
acetone	67-64-1	UK HSC	TWA:1210 mg/m³(500 ppm);STEL:3620 mg/m³(1500 ppm)	
propane	74-98-6	UK HSC	Limit value not established:	asphyxiant
isopentane	78-78-4	UK HSC	TWA:1800 mg/m <sup>3</sup> (600 ppm)	

UK HSC: UK Health and Safety Commission

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

CEIL: Ceiling

#### **Biological limit values**

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

#### **Derived no effect level (DNEL)**

Ingredient	Degradation Product	Population	Human exposure pattern	DNEL
Hydrocarbons, C6, isoalkanes, < 5% n-hexane		Worker	Dermal, Long-term exposure (8 hours), Systemic effects	13,964 mg/kg bw/d
Hydrocarbons, C6, isoalkanes, < 5% n-hexane		Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	5,306 mg/m³
Hydrocarbons, C7, n-alkanes, isoalkanes, eyclics		Worker	Dermal, Long-term exposure (8 hours), Systemic effects	13,964 mg/kg bw/d
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	5,306 mg/m³
Hydrocarbons, C6, isoalkanes, < 5% n-		Worker	Dermal, Long-term exposure (8 hours),	300 mg/kg bw/d

hexane		Systemic effects	
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	2,085 mg/m³
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
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/m³
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

Predicted no effect concentrations (PNEC)

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

**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

Do not remain in area where available oxygen may be reduced. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

#### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect vented goggles.

Applicable Norms/Standards
Use eye protection conforming to EN 166

#### Skin/hand protection

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

Material	Thickness (mm)	Breakthrough Time
Polymer laminate	>.3	=>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

For questions about suitability for a specific application, consult with your respirator manufacturer.

Applicable Norms/Standards

Use a respirator conforming to EN 140 or EN 136: filter type A

#### 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
Specific Physical Form:
Colour
Transpar

**Colour** Transparent White **Odor** Strong Ketones

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

Flash point -42 °C

Autoignition temperatureNo data available.Decomposition temperatureNo data available.

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

Kinematic Viscosity
Not applicable.
Water solubility
Nil

Water solubility
Solubility- non-water

Solubility- non-water

Partition coefficient: n-octanol/water

No data available.

Vapour pressure

No data available.

No data available.

**Density** 0.74 g/ml

**Relative density**0.74 [Ref Std: WATER=1] **Relative Vapour Density**>=1 [Ref Std: AIR=1]

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds

Evaporation rate

No data available.

No data available.

Percent volatile

75 % 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

Sparks and/or flames.

Heat.

#### 10.5 Incompatible materials

None known.

#### 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

Simple asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal. Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

#### Skin contact

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

#### Eye contact

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

#### Ingestion

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

#### Additional Health Effects:

#### Single exposure may cause target organ effects:

Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness. Single exposure, above recommended guidelines, may cause: Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

#### **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
propane	Inhalation- Gas (4 hours)	Rat	LC50 > 200,000 ppm
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
isobutane	Inhalation- Gas (4 hours)	Rat	LC50 276,000 ppm
dimethyl ether	Inhalation- Gas (4	Rat	LC50 164,000 ppm

Dogg 10 of 2

	hours)		
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 > 5,100 mg/kg LD50 > 2,000 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation-	Rat	LC50 > 14.7 mg/l
Try droedrooms, e.y, it distances, isodistances, eyenes	Vapour (4	Tut	Ecsov 11.7 mg r
	hours)		
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation-	Rat	LC50 > 23.3 mg/l
	Vapour (4		
	hours)		
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation-	Rat	LC50 > 5.61 mg/l
	Vapour (4		
	hours)		
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
butane	Inhalation-	Rat	LC50 277,000 ppm
	Gas (4		
	hours)		
Butadiene-styrene-meta-divinylbenzene polymer	Dermal		LD50 estimated to be > 5,000 mg/kg
Butadiene-styrene-meta-divinylbenzene polymer	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-	Dermal	Professio	LD50 estimated to be > 5,000 mg/kg
dimethyl-2-methylenebicyclo[3.1.1]heptane		nal	
		judgeme	
		nt	
2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-	Ingestion	Rat	LD50 > 2,000  mg/kg
dimethyl-2-methylenebicyclo[3.1.1]heptane			
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Dermal	Rabbit	LD50 > 2,920 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Dermal	Rabbit	LD50 > 3,160 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Dermal	Rabbit	LD50 > 3,160 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Dermal	Rat	LD50 > 2,000 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation-	Rat	LC50 > 14.7 mg/l
	Vapour (4		
W. 1. 1. 00 i ii	hours)	D :	X 050 - 22.2 //
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation-	Rat	LC50 > 23.3 mg/l
	Vapour (4 hours)		
Hadrandon CC inclines < 50/ a harring	Inhalation-	D-4	LC50 > 5 (1 m = //
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Vapour (4	Rat	LC50 > 5.61 mg/l
	hours)		
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
Glycerol ester of hydrogenated rosin	Dermal	Rat	LD50 > 2,000 mg/kg
Glycerol ester of hydrogenated rosin	Ingestion	Rat	LD50 > 2,000 mg/kg LD50 > 2,000 mg/kg
pentane	Dermal	Rabbit	LD50 > 2,000 mg/kg  LD50 3,000 mg/kg
pentane	Inhalation-	Rat	LC50 > 18 mg/l
pentane	Vapour (4	IXat	2007 10 mg/1
	hours)		
pentane	Ingestion	Rat	LD50 > 2,000 mg/kg
isopentane	Dermal	Rabbit	LD50 3,000 mg/kg
isopentane	Inhalation-	Rat	LC50 > 18 mg/l
- sopermite	Vapour (4	1	2000 To mg I
	hours)		
isopentane	Ingestion	Rat	LD50 > 2,000 mg/kg
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Inhalation-		LC50 estimated to be 20 - 50 mg/l
, , , , , , , , , , , , , , , , , , , ,	Vapour		
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Dermal	Rabbit	LD50 > 5,000 mg/kg
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Ingestion	Rat	LD50 > 5,000 mg/kg
<del></del>			

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species Value
------	---------------

D 11 0

propane	Rabbit	Minimal irritation
acetone	Mouse	Minimal irritation
isobutane	Professio	No significant irritation
	nal	
	judgemen	
	t	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Rabbit	Irritant
butane	Professio	No significant irritation
	nal	
	judgemen	
	t	
Butadiene-styrene-meta-divinylbenzene polymer	Professio	Minimal irritation
	nal	
	judgemen	
	t	
2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-	In vitro	No significant irritation
methylenebicyclo[3.1.1]heptane	data	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Rabbit	Irritant
Glycerol ester of hydrogenated rosin	Rabbit	No significant irritation
pentane	Rabbit	Minimal irritation
isopentane	Rabbit	Minimal irritation
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Rabbit	Minimal irritation

**Serious Eye Damage/Irritation** 

Name	Species	Value
propane	Rabbit	Mild irritant
acetone	Rabbit	Severe irritant
isobutane	Professio	No significant irritation
	nal	
	judgemen	
	t	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Rabbit	No significant irritation
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Rabbit	Mild irritant
butane	Rabbit	No significant irritation
2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-	In vitro	No significant irritation
methylenebicyclo[3.1.1]heptane	data	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Rabbit	No significant irritation
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Rabbit	Mild irritant
Glycerol ester of hydrogenated rosin	Rabbit	Mild irritant
pentane	Rabbit	Mild irritant
isopentane	Rabbit	Mild irritant
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Rabbit	Mild irritant

#### **Skin Sensitisation**

Name	Species	Value
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Guinea pig	Not classified
2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane	Multiple animal species	Not classified
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Guinea pig	Not classified
Glycerol ester of hydrogenated rosin	Human and animal	Not classified
pentane	Guinea pig	Not classified
isopentane	Guinea pig	Not classified
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Guinea pig	Not classified

#### **Respiratory Sensitisation**

For the component/components, either no data is currently available or the data is not sufficient for classification.

**Germ Cell Mutagenicity** 

Name	Route	Value		
propane	In Vitro	Not mutagenic		
acetone	In vivo	Not mutagenic		
acetone	In Vitro	Some positive data exist, but the data are not sufficient for classification		
isobutane	In Vitro	Not mutagenic		
dimethyl ether	In Vitro	Not mutagenic		
dimethyl ether	In vivo	Not mutagenic		
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	In Vitro	Not mutagenic		
butane	In Vitro	Not mutagenic		
2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane	In Vitro	Not mutagenic		
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	In Vitro	Not mutagenic		
pentane	In vivo	Not mutagenic		
pentane	In Vitro	Some positive data exist, but the data are not sufficient for classification		
isopentane	In vivo	Not mutagenic		
isopentane	In Vitro	Some positive data exist, but the data are not sufficient for classification		
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	In Vitro	Not mutagenic		
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	In vivo	Not mutagenic		

Carcinogenicity

Name	Route	Species	Value
acetone	Not specified.	Multiple animal species	Not carcinogenic
dimethyl ether	Inhalation	Rat	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
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Not specified.	Not available	Not carcinogenic

### **Reproductive Toxicity**

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
acetone	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,700 mg/kg/day	13 weeks
acetone	Inhalation	Not classified for development	Rat	NOAEL 5.2 mg/l	during organogenesis
dimethyl ether	Inhalation	Not classified for development	Rat	NOAEL 40,000 ppm	during organogenesis
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	2 generation
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	2 generation
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Not specified.	Not classified for development	Rat	NOAEL Not available	2 generation
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-	Not	Not classified for development	Rat	NOAEL Not	2 generation

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hexane	specified.			available	
pentane	Ingestion	Not classified for development	Rat	NOAEL	during .
				1,000	organogenesis
				mg/kg/day	
pentane	Inhalation	Not classified for development	Rat	NOAEL 30	during
				mg/l	organogenesis
isopentane	Ingestion	Not classified for development	Rat	NOAEL	during
				1,000	organogenesis
				mg/kg/day	
isopentane	Inhalation	Not classified for development	Rat	NOAEL 30	during
				mg/l	organogenesis
Hydrocarbons, C11-C13, isoalkanes, <2%	Not	Not classified for female reproduction	Not	NOAEL NA	1 generation
aromatics	specified.	•	available		
Hydrocarbons, C11-C13, isoalkanes, <2%	Not	Not classified for male reproduction	Not	NOAEL NA	28 days
aromatics	specified.	•	available		·
Hydrocarbons, C11-C13, isoalkanes, <2%	Not	Not classified for development	Not	NOAEL NA	during
aromatics	specified.	_	available		gestation

## Target Organ(s)

**Specific Target Organ Toxicity - single exposure** 

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
propane	Inhalation	cardiac sensitisation	Causes damage to organs	Human	NOAEL Not available	
propane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
propane	Inhalation	respiratory irritation	Not classified	Human	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
isobutane	Inhalation	cardiac sensitisation	Causes damage to organs	Multiple animal species	NOAEL Not available	
isobutane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
isobutane	Inhalation	respiratory irritation	Not classified	Mouse	NOAEL Not available	
dimethyl ether	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Rat	LOAEL 10,000 ppm	30 minutes
dimethyl ether	Inhalation	cardiac sensitisation	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 100,000 ppm	5 minutes
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	NOAEL Not available	

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				judgeme nt		
butane	Inhalation	cardiac sensitisation	Causes damage to organs	Human	NOAEL Not available	
butane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
butane	Inhalation	heart	Not classified	Dog	NOAEL 5,000 ppm	25 minutes
butane	Inhalation	respiratory irritation	Not classified	Rabbit	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	
pentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
pentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL Not available	not available
pentane	Inhalation	cardiac sensitisation	Not classified	Dog	NOAEL Not available	not available
pentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	not available
isopentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
isopentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL Not available	not available
isopentane	Inhalation	cardiac sensitisation	Not classified	Dog	NOAEL Not available	not available
isopentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	not available

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
acetone	Dermal	eyes	Not classified	Guinea pig	NOAEL Not available	3 weeks
acetone	Inhalation	hematopoietic system	Not classified	Human	NOAEL 3 mg/l	6 weeks
acetone	Inhalation	immune system	Not classified	Human	NOAEL 1.19 mg/l	6 days
acetone	Inhalation	kidney and/or bladder	Not classified	Guinea pig	NOAEL 119 mg/l	not available
acetone	Inhalation	heart   liver	Not classified	Rat	NOAEL 45 mg/l	8 weeks
acetone	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 900 mg/kg/day	13 weeks
acetone	Ingestion	heart	Not classified	Rat	NOAEL	13 weeks

					2,500	
					mg/kg/day	
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
isobutane	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 4,500 ppm	13 weeks
dimethyl ether	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 25,000 ppm	2 years
dimethyl ether	Inhalation	liver	Not classified	Rat	NOAEL 20,000 ppm	30 weeks
butane	Inhalation	kidney and/or bladder   blood	Not classified	Rat	NOAEL 4,489 ppm	90 days
2,6,6- Trimethylbicyclo[3.1.1]he pt-2-ene, polymer with 6,6-dimethyl-2- methylenebicyclo[3.1.1]he ptane	Ingestion	heart   gastrointestinal tract   hematopoietic system   liver   nervous system   eyes   kidney and/or bladder	Not classified	Rat	NOAEL 331 mg/kg/day	90 days
pentane	Inhalation	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
pentane	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   respiratory system	Not classified	Rat	NOAEL 20 mg/l	13 weeks
pentane	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 2,000 mg/kg/day	28 days
isopentane	Inhalation	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
isopentane	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   respiratory system	Not classified	Rat	NOAEL 20 mg/l	13 weeks
isopentane	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 2,000	28 days

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		mg/kg/dav	
		mg/kg/day	

#### **Aspiration Hazard**

Name	Value
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Aspiration hazard
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Aspiration hazard
pentane	Aspiration hazard
isopentane	Aspiration hazard
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

#### 11.2. Information on other hazards

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

### **SECTION 12: Ecological information**

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

#### 12.1. Toxicity

No product test data available.

Material	CAS#	Organism	Type	Exposure	Test endpoint	Test result
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
propane	74-98-6	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
2,6,6- Trimethylbicyclo[3.1.1] hept-2-ene, polymer with 6,6-dimethyl-2- methylenebicyclo[3.1.1] heptane	31393-98-3	Activated sludge	Experimental	3 hours	NOEC	1,000 mg/l
2,6,6- Trimethylbicyclo[3.1.1] hept-2-ene, polymer with 6,6-dimethyl-2- methylenebicyclo[3.1.1] heptane	31393-98-3	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
2,6,6- Trimethylbicyclo[3.1.1] hept-2-ene, polymer with 6,6-dimethyl-2- methylenebicyclo[3.1.1] heptane	31393-98-3	Water flea	Endpoint not reached	21 days	EL10	>100 mg/l

	1	I	T_		L	In a constant
Butadiene-styrene- meta-divinylbenzene polymer	26471-45-4	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
butane	106-97-8	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
dimethyl ether	115-10-6	Bacteria	Experimental	N/A	EC10	>1,600 mg/l
dimethyl ether	115-10-6	Guppy	Experimental	96 hours	LC50	>4,100 mg/l
dimethyl ether	115-10-6	Water flea	Experimental	48 hours	EC50	>4,400 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Green algae	Analogous Compound	72 hours	EL50	29 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Medaka	Analogous Compound	96 hours	LC50	0.561 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Water flea	Analogous Compound	48 hours	EC50	0.4 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Fathead minnow	Estimated	96 hours	LL50	8.2 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Green algae	Estimated	72 hours	EL50	3.1 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Green algae	Estimated	72 hours	EL50	29 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Green algae	Estimated	72 hours	EL50	55 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Water flea	Estimated	48 hours	EL50	3 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Water flea	Estimated	48 hours	EL50	4.5 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Water flea	Estimated	48 hours	LC50	3.9 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Rainbow trout	Experimental	96 hours	LL50	>13.4 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Green algae	Analogous Compound	72 hours	NOEL	6.3 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Water flea	Analogous Compound	21 days	NOEC	0.17 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Green algae	Estimated	72 hours	NOEL	0.5 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Green algae	Estimated	72 hours	NOEL	6.3 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Green algae	Estimated	72 hours	NOEL	30 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Water flea	Estimated	21 days	NOEL	1 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Water flea	Estimated	21 days	NOEL	2.6 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes,	927-510-4	Activated sludge	Analogous Compound	15 hours	IC50	29 mg/l

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cyclics						
isobutane	75-28-5	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Glycerol ester of hydrogenated rosin	65997-13-9	Green algae	Estimated	72 hours	No tox obs at lmt of water sol	>100 mg/l
Glycerol ester of hydrogenated rosin	65997-13-9	Rainbow trout	Estimated	96 hours	No tox obs at lmt of water sol	>100 mg/l
Glycerol ester of hydrogenated rosin	65997-13-9	Water flea	Estimated	48 hours	No tox obs at lmt of water sol	>100 mg/l
Glycerol ester of hydrogenated rosin	65997-13-9	Green algae	Estimated	72 hours	No tox obs at lmt of water sol	>100 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Green algae	Analogous Compound	72 hours	EL50	29 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Medaka	Analogous Compound	96 hours	LC50	0.561 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Water flea	Analogous Compound	48 hours	EC50	0.4 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Fathead minnow	Estimated	96 hours	LL50	8.2 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Green algae	Estimated	72 hours	EL50	3.1 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Green algae	Estimated	72 hours	EL50	29 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Green algae	Estimated	72 hours	EL50	55 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Water flea	Estimated	48 hours	EL50	3 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Water flea	Estimated	48 hours	EL50	4.5 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Water flea	Estimated	48 hours	LC50	3.9 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Rainbow trout	Experimental	96 hours	LL50	>13.4 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Green algae	Analogous Compound	72 hours	NOEL	6.3 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Water flea	Analogous Compound	21 days	NOEC	0.17 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Green algae	Estimated	72 hours	NOEL	0.5 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Green algae	Estimated	72 hours	NOEL	6.3 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Green algae	Estimated	72 hours	NOEL	30 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Water flea	Estimated	21 days	NOEL	1 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Water flea	Estimated	21 days	NOEL	2.6 mg/l

Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Activated sludge	Analogous Compound	15 hours	IC50	29 mg/l
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	920-901-0	Green algae	Estimated	72 hours	EL50	>1,000 mg/l
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	920-901-0	Rainbow trout	Estimated	96 hours	LL50	>1,000 mg/l
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	920-901-0	Water flea	Estimated	48 hours	EL50	>1,000 mg/l
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	920-901-0	Green algae	Estimated	72 hours	NOEL	1,000 mg/l
pentane	109-66-0	Green algae	Experimental	72 hours	EC50	10.7 mg/l
pentane	109-66-0	Rainbow trout	Experimental	96 hours	LC50	4.26 mg/l
pentane	109-66-0	Water flea	Experimental	48 hours	EC50	2.7 mg/l
pentane	109-66-0	Green algae	Experimental	72 hours	NOEC	2.04 mg/l
isopentane	78-78-4	N/A	Data not available or insufficient for classification	N/A	N/A	N/A

### 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
acetone	67-64-1	Experimental	28 days	BOD	78 %BOD/ThO	OECD 301D - Closed bottle
		Biodegradation			D	test
acetone	67-64-1	Experimental		Photolytic half-life	147 days (t 1/2)	
		Photolysis		(in air)		
propane	74-98-6	Experimental		Photolytic half-life	27.5 days (t	
		Photolysis		(in air)	1/2)	
2,6,6-	31393-98-3	Experimental	28 days	BOD	4 %BOD/ThO	OECD 301D - Closed bottle
Trimethylbicyclo[3.1.1]hept		Biodegradation			D	test
-2-ene, polymer with 6,6-dimethyl-2-						
methylenebicyclo[3.1.1]hep						
tane						
Butadiene-styrene-meta-	26471-45-4	Data not availbl-	N/A	N/A	N/A	N/A
divinylbenzene polymer		insufficient				
butane	106-97-8	Experimental		Photolytic half-life	12.3 days (t	
		Photolysis		(in air)	1/2)	
dimethyl ether	115-10-6	Experimental	28 days	BOD	5 %BOD/ThO	OECD 301D - Closed bottle
		Biodegradation			D	test
dimethyl ether	115-10-6	Experimental		Photolytic half-life	12.4 days (t	
XX 1 1 07	007 510 4	Photolysis	20.1	(in air)	1/2)	OFGD 201F M
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Analogous Compound	28 days	BOD	74.4 %BOD/Th OD	
arkanes, isoarkanes, cyclics		Biodegradation			OD	respirometry
Hydrocarbons, C7, n-	927-510-4	Estimated	28 days	BOD	98 %BOD/CO	OECD 301F - Manometric
alkanes, isoalkanes, cyclics	27 310 1	Biodegradation	20 44,5	Bob	D	respirometry
Hydrocarbons, C7, n-	927-510-4	Estimated	28 days	BOD	77 %BOD/ThO	OECD 301F - Manometric
alkanes, isoalkanes, cyclics		Biodegradation	, i		D	respirometry
Hydrocarbons, C7, n-	927-510-4	Estimated	28 days	BOD	98 %BOD/CO	OECD 301F - Manometric
alkanes, isoalkanes, cyclics		Biodegradation			D	respirometry
isobutane	75-28-5	Experimental		Photolytic half-life	13.4 days (t	
		Photolysis		(in air)	1/2)	
Glycerol ester of	65997-13-9	Experimental	28 days	CO2 evolution	47.3 %CO2	OECD 301B - Modified
hydrogenated rosin		Biodegradation			evolution/THC	sturm or CO2
IIl	021 254 0	A 1	20 4	DOD	O2 evolution	OECD 301F - Manometric
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Analogous Compound	28 days	BOD	/4.4 %BOD/1h OD	
isoaikanes, > 570 ii- nexane		Biodegradation			עט	respirometry
	1	Dioucgiauation			l	l

Hydrocarbons, C6,	931-254-9	Estimated	28 days	BOD	98 %BOD/CO	OECD 301F - Manometric
isoalkanes, < 5% n- hexane		Biodegradation			D	respirometry
Hydrocarbons, C6,	931-254-9	Estimated	28 days	BOD	77 %BOD/ThO	OECD 301F - Manometric
isoalkanes, < 5% n- hexane		Biodegradation			D	respirometry
Hydrocarbons, C6,	931-254-9	Estimated	28 days	BOD	98 %BOD/CO	OECD 301F - Manometric
isoalkanes, < 5% n- hexane		Biodegradation			D	respirometry
Hydrocarbons, C11-C13,	920-901-0	Estimated	28 days	BOD	31.3 %BOD/Th	OECD 301F - Manometric
isoalkanes, <2% aromatics		Biodegradation			OD	respirometry
pentane	109-66-0	Experimental	28 days	BOD	87 %BOD/ThO	OECD 301F - Manometric
		Biodegradation			D	respirometry
pentane	109-66-0	Experimental		Photolytic half-life	8.07 days (t	
		Photolysis		(in air)	1/2)	
isopentane	78-78-4	Experimental	28 days	BOD	71.43 %BOD/T	
		Biodegradation			hOD	
isopentane	78-78-4	Experimental		Photolytic half-life	8.11 days (t	
		Photolysis		(in air)	1/2)	

### 12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
acetone	67-64-1	Experimental BCF - Other		Bioaccumulation factor	0.65	
acetone	67-64-1	Experimental Bioconcentration		Log Kow	-0.24	
propane	74-98-6	Experimental Bioconcentration		Log Kow	2.36	
2,6,6- Trimethylbicyclo[3.1.1]hep t-2-ene, polymer with 6,6- dimethyl-2- methylenebicyclo[3.1.1]he ptane	31393-98-3	Experimental Bioconcentration		Log Kow	7.41	
Butadiene-styrene-meta- divinylbenzene polymer	26471-45-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
butane	106-97-8	Experimental Bioconcentration		Log Kow	2.89	
dimethyl ether	115-10-6	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	Analogous Compound BCF - Fish	28 days	Bioaccumulation factor	540	OECD305-Bioconcentration
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Analogous Compound Bioconcentration		Log Kow	4.66	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Estimated Bioconcentration		Log Kow	3.6	
isobutane	75-28-5	Experimental Bioconcentration		Log Kow	2.76	
Glycerol ester of hydrogenated rosin	65997-13-9	Estimated Bioconcentration		Bioaccumulation factor	7.4	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Analogous Compound BCF - Fish	28 days	Bioaccumulation factor	540	OECD305-Bioconcentration

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Hydrocarbons, C6,	931-254-9	Analogous		Log Kow	4.66	
isoalkanes, < 5% n- hexane		Compound				
		Bioconcentration				
Hydrocarbons, C6,	931-254-9	Estimated		Log Kow	3.6	
isoalkanes, < 5% n- hexane		Bioconcentration				
Hydrocarbons, C11-C13,	920-901-0	Data not available	N/A	N/A	N/A	N/A
isoalkanes, <2% aromatics		or insufficient for				
		classification				
pentane	109-66-0	Estimated		Bioaccumulation	26	
		Bioconcentration		factor		
isopentane	78-78-4	Experimental		Log Kow	2.3	
		Bioconcentration				

#### 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>
dimethyl ether	115-10-6	Modeled Mobility in Soil	Koc	3 l/kg	Episuite <sup>TM</sup>
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Modeled Mobility in Soil	Koc	≥202 l/kg	Episuite <sup>TM</sup>
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Modeled Mobility in Soil	Koc	≥202 l/kg	Episuite <sup>TM</sup>
pentane	109-66-0	Estimated Mobility in Soil	Koc	72 l/kg	Episuite <sup>TM</sup>

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

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

#### 12.6. Endocrine disrupting properties

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

#### 12.7. Other adverse effects

No information available.

### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

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

Incinerate in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. As a disposal alternative, utilize an acceptable permitted waste disposal facility. The facility should be equipped to handle gaseous waste. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

#### EU waste code (product as sold)

16 05 04\* Gases in pressure containers (including halons) containing dangerous substances

20 01 27\* Paint, inks, adhesives and resins containing dangerous substances

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

15 01 04 Metallic packaging

### **SECTION 14: Transportation information**

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number or ID number	UN1950	UN1950	UN1950
14.2 UN proper shipping name	AEROSOLS	AEROSOLS, FLAMMABLE	AEROSOLS
14.3 Transport hazard class(es)	2.1	2.1	2.1
14.4 Packing group	Not applicable.	Not applicable.	Not applicable.
14.5 Environmental hazards	Not Environmentally Hazardous	Not applicable	Not a Marine Pollutant
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Marine Transport in bulk according to IMO instruments	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
<b>Emergency Temperature</b>	No data available.	No data available.	No data available.
ADR Classification Code	5F	Not applicable.	Not applicable.
IMDG Segregation Code	Not applicable.	Not applicable.	NONE

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

### **SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status

Contact 3M for more information.

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

Seveso hazard categories, Annex 1, Part 1

Hazard Categories	Qualifying quantity (tonnes) for the application of	
	Lower-tier requirements	Upper-tier requirements
P3a FLAMMABLE AEROSOLS	150 (net)	500 (net)

Seveso named dangerous substances, Annex 1, Part 2

Dangerous Substances	Identifier(s)	Qualifying quantity (tonnes	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements	
acetone	67-64-1	10	50	
butane	106-97-8	10	50	
dimethyl ether	115-10-6	10	50	
isobutane	75-28-5	10	50	
isopentane	78-78-4	10	50	
pentane	109-66-0	10	50	
propane	74-98-6	10	50	

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

No chemicals listed

#### 15.2. Chemical Safety Assessment

A chemical safety assessment has been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended.

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

#### List of relevant H statements

EUH066	Repeated exposure may cause skin dryness or cracking.
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: may burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
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.
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#### **Revision information:**

Professional Use of Coatings: Section 16: Annex information was modified.

Label: CLP Classification information was modified.

Label: CLP Environmental Hazard Statements information was modified.

Label: CLP Percent Unknown information was deleted.

Label: CLP Precautionary - Prevention information was modified.

- Label: CLP Precautionary Response information was added.
- Label: CLP Precautionary Storage information was modified.
- Label: Graphic information was modified.
- Section 3: Composition/Information of ingredients table information was modified.
- Section 8: glove data value information was modified.
- Section 8: Respiratory protection recommended respirators information information was modified.
- Section 9: Vapour density value information was modified.
- Section 11: Acute Toxicity table information was modified.
- Section 11: Germ Cell Mutagenicity Table information was modified.
- Section 11: Reproductive Toxicity Table information was modified.
- Section 11: Reproductive/developmental effects information information was deleted.
- Section 11: Serious Eye Damage/Irritation Table information was modified.
- Section 11: Skin Corrosion/Irritation Table information was modified.
- Section 11: Skin Sensitization Table information was modified.
- Section 11: Target Organs Repeated Table information was added.
- Section 11: Target Organs Repeated Table information was deleted.
- Section 12: Component ecotoxicity information information was modified.
- Section 12: Mobility in soil information information was modified.
- Section 12: Persistence and Degradability information information was modified.
- Section 12:Bioccumulative potential information information was modified.
- Section 14 Multiplier Main Heading information was deleted.
- Section 14 Multiplier Regulation Data information was deleted.
- 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: Chemical Safety Assessment information was modified.
- Section 15: Seveso Hazard Category Text information was added.
- Section 15: Seveso Substance Text information was added.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was modified.

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

### Annex

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 Coatings	
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	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;	
	Emission days per year: 365 days/year;	
	Indoor use;	

	Outdoor use;	
D. I.	T 1 4 2 1 12 1 2 1 4 6 1 2 1	
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	ement 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	on of exposure Human and environmental exposures are not expected to exceed the DNELs and	
	PNECs when the identified risk management measures are adopted.	

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

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