

## **Safety Data Sheet**

Copyright, 2017, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilising 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

 Document group:
 27-7169-9
 Version number:
 8.03

 Revision date:
 30/11/2017
 Supersedes date:
 22/09/2017

**Transportation version number:** 2.00 (09/08/2015)

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 CraftMount Permanent Adhesive

#### **Product Identification Numbers**

YP-2080-6014-2 YP-2080-6015-9

7100025602 7100025603

#### 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

#### **CLASSIFICATION:**

Aerosol, Category 1 - Aerosol 1; H222, H229

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

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

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	< 20
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		927-510-4	< 10

#### **HAZARD STATEMENTS:**

H222 Extremely flammable aerosol.

H229 Pressurised container. may burst if heated.

H319 Causes serious eye irritation.
H315 Causes skin 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:** 

P210A 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.

**Storage:** 

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

Disposal:

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

regulations.

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

22% of the mixture consists of components of unknown acute dermal toxicity.

37% of the mixture consists of components of unknown acute inhalation toxicity.

Contains 25% of components with unknown hazards to the aquatic environment.

Notes on labelling

\_\_\_\_

H304 is not required on the label because the product is an aerosol. Nota P applied to CAS # 64742-48-9, 64742-49-0, and 92045-53-9

## 2.3. Other hazards

None known.

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

Ingredient	CAS Nbr	EC No.	REACH Registration	% by V	Vt	Classification
			No.			
Nonvolatile components	Trade Secret			20 -	30	Substance not classified as hazardous
Propane	74-98-6	200-827-9	01- 2119486944- 21	10 -	20	Flam. Gas 1, H220; Liquified gas, H280 - Nota U
Acetone	67-64-1	200-662-2	01- 2119471330- 49	< 20		Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336; EUH066
Butadiene-styrene-meta- divinylbenzene polymer	26471-45-4			7 -	13	Substance not classified as hazardous
Dimethyl Ether	115-10-6	204-065-8		7 -	13	Flam. Gas 1, H220; Liquified gas, H280 - Nota U
Resin acids and Rosin acids, hydrogenated, esters with glycerol	65997-13-9	266-042-9	01- 2119487112- 43	1 -	10	Substance with a Community level exposure limit in the workplace
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		927-510-4	01- 2119475515- 33	< 10		Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Chronic 2, H411
Hydrocarbons, C6, isoalkanes, < 5% n-Hexane		931-254-9	01- 2119484651- 34	1 -	7	Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Chronic 2, H411
Pentane	109-66-0	203-692-4		3 -	7	Flam. Liq. 2, H225; Asp. Tox. 1, H304; STOT SE 3, H336; EUH066; Aquatic Chronic 2, H411 - Nota C
Butane	106-97-8	203-448-7	01- 2119474691- 32	3 -	7	Flam. Gas 1, H220; Liquified gas, H280 - Nota C,U
Isobutane	75-28-5	200-857-2	01- 2119485395- 27	1 -	5	Flam. Gas 1, H220; Liquified gas, H280 - Nota C,U
Naphtha (petroleum), hydrotreated heavy	64742-48-9	265-150-3		1 -	3	Asp. Tox. 1, H304 - Nota P Aquatic Chronic 2, H411 Skin Irrit. 2, H315; STOT SE 3, H336
Limestone	1317-65-3	215-279-6		< 2		Substance with a Community level exposure limit in the workplace
2-methylbutane	78-78-4	201-142-8		0.5 -	2	Flam. Liq. 1, H224; Asp. Tox. 1, H304; STOT SE 3,

\_\_\_\_\_

				H336; EUH066; Aquatic Chronic 2, H411
Methylcyclohexane	108-87-2	203-624-3	0.5 - 1.5	Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Chronic 2, H411
Cyclopentane	287-92-3	206-016-6	0.5 - 1.5	Flam. Liq. 2, H225; Aquatic Chronic 3, H412
n-hexane	110-54-3	203-777-6	0.1 - 1	Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Repr. 2, H361f; STOT SE 3, H336; STOT RE 2, H373; Aquatic Chronic 2, H411

Note: Any entry in the EC# 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.

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

#### **Eve 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

See Section 11.1 Information on toxicological effects

## 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 Substance**

**Condition** 

Aldehydes. During combustion. Hydrocarbons. During combustion. Formaldehyde During combustion. Carbon monoxide. During combustion. Carbon dioxide. During combustion. During combustion.

#### 5.3. Advice for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

## **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

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

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. An appropriate aqueous film forming foam (AFFF) is recommended. 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. 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

Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Protect from sunlight. Store in a well-ventilated place. 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.

To an diant	CACNIL	A	T ::4 4	A 4 4:4: 1 4 -
Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Butane	106-97-8	UK HSC	TWA:1450 mg/m³(600	
			ppm);STEL:1810 mg/m <sup>3</sup> (750	
			ppm)	
Pentane	109-66-0	UK HSC	$TWA:1800 \text{ mg/m}^3(600 \text{ ppm})$	
n-hexane	110-54-3	UK HSC	TWA:72 mg/m3(20 ppm)	
Dimethyl Ether	115-10-6	UK HSC	TWA:766 mg/m <sup>3</sup> (400	
			ppm);STEL:958 mg/m <sup>3</sup> (500	
			ppm)	
Limestone	1317-65-3	UK HSC	TWA(as inhalable dust):10	
			mg/m3;TWA(as respirable	
			dust):4	
			mg/m3;TWA(Inhalable):10	
			mg/m3;TWA(respirable):4	
			mg/m3	
Naphtha (petroleum),	64742-48-9	Manufacturer	TWA:100 ppm	
hydrotreated heavy	04/42 40 /	determined	1 W 1.100 ppm	
Rosin	65997-13-9	UK HSC	TWA(as fume):0.05	Respiratory Sensitizer
KOSIII	03997-13-9	UKIISC	,	Respiratory Sensitizer
			mg/m³;STEL(as fume):0.15	
	6 <b>7</b> 64 1		mg/m³	
Acetone	67-64-1	UK HSC	TWA:1210 mg/m <sup>3</sup> (500	
			ppm);STEL:3620 mg/m <sup>3</sup> (1500	
			ppm)	
Propane	74-98-6	UK HSC	Limit value not established:	asphyxiant
2-methylbutane	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	300 mg/kg bw/d
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics		Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	2,085 mg/m <sup>3</sup>

#### Predicted no effect concentrations (PNEC)

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

#### 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:

MaterialThickness (mm)Breakthrough TimePolymer laminateNo data availableNo data available

Applicable Norms/Standards Use gloves tested to EN 374

#### **Respiratory protection**

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

Half facepiece or full facepiece supplied-air respirator

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

#### 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: Aerosol

Appearance/Odour Transparent - white liquid in aerosol, strong ketone odour

Odour thresholdNo data available.pHNot applicable.Boiling point/boiling rangeNot applicable.Melting pointNot applicable.Flammability (solid, gas)Not applicable.Explosive propertiesNot classifiedOxidising propertiesNot classifiedFlash point-42 °C

Autoignition temperatureNo data available.Flammable Limits(LEL)No data available.Flammable Limits(UEL)No data available.Vapour pressureNo data available.

**Relative density** 0.74 [*Ref Std*:WATER=1]

Water solubility Nil

Solubility- non-waterNo data available.Partition coefficient: n-octanol/waterNo data available.Evaporation rateNo data available.Vapour density>=1 [Ref Std: AIR=1]Decomposition temperatureNo data available.ViscosityNot applicable.Density0.74 g/ml

9.2. Other information

EU Volatile Organic Compounds

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** 

None known.

**Condition** 

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 3M assessments.

#### 11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

#### Inhalation

Intentional concentration and inhalation may be harmful or fatal. 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 sensitisation: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

#### 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

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
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
Propane	Inhalation- Gas (4 hours)	Rat	LC50 > 200,000 ppm
Dimethyl Ether	Inhalation- Gas (4 hours)	Rat	LC50 164,000 ppm
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
Nonvolatile components	Dermal		LD50 estimated to be > 5,000 mg/kg
Nonvolatile components	Ingestion	Rat	LD50 > 34,000 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation- Vapour (4 hours)	Not available	LC50 > 20 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Dermal	Rabbit	LD50 > 2,000 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Ingestion	Rat	LD50 > 5,000 mg/kg
Pentane	Dermal	Rabbit	LD50 3,000 mg/kg
Pentane	Inhalation- Vapour (4 hours)	Rat	LC50 > 18 mg/l
Pentane	Ingestion	Rat	LD50 > 2,000 mg/kg
Butane	Inhalation- Gas (4 hours)	Rat	LC50 277,000 ppm
Resin acids and Rosin acids, hydrogenated, esters with glycerol	Dermal	Rat	LD50 > 2,000 mg/kg
Resin acids and Rosin acids, hydrogenated, esters with glycerol	Ingestion	Rat	LD50 > 2,000 mg/kg
Isobutane	Inhalation- Gas (4 hours)	Rat	LC50 276,000 ppm
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	Dermal		LD50 > 5,000 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	Inhalation- Vapour (4 hours)	Rat	LC50 > 20 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	Ingestion	Rat	LD50 > 5,000 mg/kg
2-methylbutane	Dermal	Rabbit	LD50 3,000 mg/kg
2-methylbutane	Inhalation- Vapour (4 hours)	Rat	LC50 > 18 mg/l
2-methylbutane	Ingestion	Rat	LD50 > 2,000 mg/kg
Naphtha (petroleum), hydrotreated heavy	Inhalation- Vapour	D. I.I.	LC50 estimated to be 20 - 50 mg/l
Naphtha (petroleum), hydrotreated heavy	Dermal	Rabbit	LD50 > 3,000 mg/kg
Naphtha (petroleum), hydrotreated heavy  Methylcyclohexane	Ingestion Inhalation- Vapour (4 hours)	Rat Mouse	LC50 > 5,000 mg/kg LC50 26 mg/l
Methylcyclohexane	Dermal	Rabbit	LD50 > 86,700 mg/kg
Methylcyclohexane	Ingestion	Rat	LD50 > 3,200 mg/kg
Limestone	Dermal	Rat	LD50 > 2,000 mg/kg
Limestone	Inhalation- Dust/Mist (4 hours)	Rat	LC50 3 mg/l

Limestone	Ingestion	Rat	LD50 6,450 mg/kg
Cyclopentane	Dermal		LD50 estimated to be > 5,000 mg/kg
Cyclopentane	Inhalation- Vapour (4 hours)	Rat	LC50 > 25.3 mg/l
Cyclopentane	Ingestion	Rat	LD50 > 5,000 mg/kg
n-hexane	Dermal	Rabbit	LD50 > 2,000 mg/kg
n-hexane	Inhalation- Vapour (4 hours)	Rat	LC50 170 mg/l
n-hexane	Ingestion	Rat	LD50 > 28,700 mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
		No. 11.22
Acetone	Mouse	Minimal irritation
Propane	Rabbit	Minimal irritation
Butadiene-styrene-meta-divinylbenzene polymer	Professio	Minimal irritation
	nal judgemen	
	t	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Professio	Irritant
	nal	
	judgemen	
	t	
Pentane	Rabbit	Minimal irritation
Butane	Professio	No significant irritation
	nal	
	judgemen	
Resin acids and Rosin acids, hydrogenated, esters with glycerol	Rabbit	No significant irritation
Isobutane	Professio	No significant irritation  No significant irritation
Isobutane	nal	No significant irritation
	judgemen	
	t	
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	Not	Irritant
	available	
2-methylbutane	Rabbit	Minimal irritation
Naphtha (petroleum), hydrotreated heavy	Rabbit	Irritant
Methylcyclohexane	Rabbit	Minimal irritation
Limestone	Rabbit	No significant irritation
Cyclopentane	Rabbit	Minimal irritation
n-hexane	Human	Mild irritant
	and	
	animal	

**Serious Eye Damage/Irritation** 

Name	Species	Value
Acetone	Rabbit	Severe irritant
Propane	Rabbit	Mild irritant
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Professio	No significant irritation
	nal	
	judgemen	
	t	
Pentane	Rabbit	Mild irritant
Butane	Rabbit	No significant irritation
Resin acids and Rosin acids, hydrogenated, esters with glycerol	Rabbit	Mild irritant
Isobutane	Professio	No significant irritation
	nal	
	judgemen	
	t	
2-methylbutane	Rabbit	Mild irritant
Naphtha (petroleum), hydrotreated heavy	Rabbit	No significant irritation

Methylcyclohexane	Rabbit	Mild irritant
Limestone	Rabbit	No significant irritation
Cyclopentane	Rabbit	Mild irritant
n-hexane	Rabbit	Mild irritant

## **Skin Sensitisation**

Name	Species	Value
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Not	Not classified
	available	
Pentane	Guinea	Not classified
	pig	
Resin acids and Rosin acids, hydrogenated, esters with glycerol	Human	Not classified
	and	
	animal	
2-methylbutane	Guinea	Not classified
	pig	
Naphtha (petroleum), hydrotreated heavy	Guinea	Not classified
	pig	
n-hexane	Human	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
Acetone	In vivo	Not mutagenic
Acetone	In Vitro	Some positive data exist, but the data are not sufficient for classification
Propane	In Vitro	Not mutagenic
Dimethyl Ether	In Vitro	Not mutagenic
Dimethyl Ether	In vivo	Not mutagenic
Pentane	In vivo	Not mutagenic
Pentane	In Vitro	Some positive data exist, but the data are not sufficient for classification
Butane	In Vitro	Not mutagenic
Isobutane	In Vitro	Not mutagenic
2-methylbutane	In vivo	Not mutagenic
2-methylbutane	In Vitro	Some positive data exist, but the data are not sufficient for classification
Naphtha (petroleum), hydrotreated heavy	In vivo	Not mutagenic
Naphtha (petroleum), hydrotreated heavy	In Vitro	Some positive data exist, but the data are not sufficient for classification
n-hexane	In Vitro	Not mutagenic
n-hexane	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Acetone	Not	Multiple	Not carcinogenic
	specified.	animal	
		species	
Dimethyl Ether	Inhalation	Rat	Not carcinogenic
Naphtha (petroleum), hydrotreated heavy	Dermal	Mouse	Some positive data exist, but the data are not
			sufficient for classification
Naphtha (petroleum), hydrotreated heavy	Inhalation	Human	Some positive data exist, but the data are not
		and	sufficient for classification
		animal	
Methylcyclohexane	Inhalation	Multiple	Not carcinogenic
		animal	
		species	
n-hexane	Dermal	Mouse	Not carcinogenic
n-hexane	Inhalation	Mouse	Some positive data exist, but the data are not
			sufficient for classification

## Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Acetone	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,700 mg/kg/day	13 weeks
Acetone	Inhalation	Not classified for development	Rat	NOAEL 5.2 mg/l	during organogenesis
Dimethyl Ether	Inhalation	Not classified for development	Rat	NOAEL 40,000 ppm	during organogenesis
Pentane	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during organogenesis
Pentane	Inhalation	Not classified for development	Rat	NOAEL 30 mg/l	during organogenesis
2-methylbutane	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during organogenesis
2-methylbutane	Inhalation	Not classified for development	Rat	NOAEL 30 mg/l	during organogenesis
Naphtha (petroleum), hydrotreated heavy	Inhalation	Not classified for development	Rat	NOAEL 2.4 mg/l	during organogenesis
Limestone	Ingestion	Not classified for development	Rat	NOAEL 625 mg/kg/day	premating & during gestation
n-hexane	Ingestion	Not classified for development	Mouse	NOAEL 2,200 mg/kg/day	during organogenesis
n-hexane	Inhalation	Not classified for development	Rat	NOAEL 0.7 mg/l	during gestation
n-hexane	Ingestion	Toxic to male reproduction	Rat	NOAEL 1,140 mg/kg/day	90 days
n-hexane	Inhalation	Toxic to male reproduction	Rat	LOAEL 3.52 mg/l	28 days

## Target Organ(s)

**Specific Target Organ Toxicity - single exposure** 

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Acetone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Acetone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Acetone	Inhalation	immune system	Not classified	Human	NOAEL 1.19 mg/l	6 hours
Acetone	Inhalation	liver	Not classified	Guinea pig	NOAEL Not available	
Acetone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
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	
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

H	T11 -4:		M	D	NOAEL N-4	1
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Professio nal	NOAEL Not available	
				judgeme		
Hydrocarbons, C7, n-	Ingestion	central nervous	May cause drowsiness or	nt Professio	NOAEL Not	
alkanes, isoalkanes, cyclics	ingestion	system depression	dizziness	nal	available	
•				judgeme		
Pentane	Inhalation	central nervous	May cause drowsiness or	nt Multiple	NOAEL Not	not available
remane	IIIIaiatioii	system depression	dizziness	animal	available	not available
				species		
Pentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for	Not	NOAEL Not available	not available
			classification	available	avanable	
Pentane	Inhalation	cardiac sensitisation	Not classified	Dog	NOAEL Not	not available
D /	Y .:	. 1	<u> </u>	D 6 :	available	. 3.11
Pentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal	NOAEL Not available	not available
		system depression	dizzmess	judgeme	avanabic	
				nt		
Butane	Inhalation	cardiac sensitisation	Causes damage to organs	Human	NOAEL Not	
Butane	Inhalation	central nervous	May cause drowsiness or	Human	available NOAEL Not	
Salano	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	system depression	dizziness	and	available	
		, ,		animal		
Butane	Inhalation	heart	Not classified	Dog	NOAEL 5,000 ppm	25 minutes
Butane	Inhalation	respiratory irritation	Not classified	Rabbit	NOAEL Not	
Buttine	imulation	respiratory irritation		Rubbit	available	
Isobutane	Inhalation	cardiac sensitisation	Causes damage to organs	Multiple	NOAEL Not	
				animal species	available	
Isobutane	Inhalation	central nervous	May cause drowsiness or	Human	NOAEL Not	
		system depression	dizziness	and	available	
· .				animal		
Isobutane	Inhalation	respiratory irritation	Not classified	Mouse	NOAEL Not available	
Hydrocarbons, C6,	Inhalation	central nervous	May cause drowsiness or		NOAEL Not	1
isoalkanes, < 5% n-		system depression	dizziness		available	
Hexane	T 1 1 4	. 1	M 1 :	M. Ir. 1	NOAFLNI	. 111
2-methylbutane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal	NOAEL Not available	not available
		by stem depression		species	u variable	
2-methylbutane	Inhalation	respiratory irritation	Some positive data exist, but the	Not	NOAEL Not	not available
			data are not sufficient for classification	available	available	
2-methylbutane	Inhalation	cardiac sensitisation	Not classified	Dog	NOAEL Not	not available
					available	
2-methylbutane	Ingestion	central nervous	May cause drowsiness or	Professio	NOAEL Not	not available
		system depression	dizziness	nal judgeme	available	
				nt		
Naphtha (petroleum),	Inhalation	central nervous	May cause drowsiness or	Human	NOAEL Not	
hydrotreated heavy		system depression	dizziness	and animal	available	
Naphtha (petroleum),	Inhalation	respiratory irritation	Some positive data exist, but the	aiiiiiai	NOAEL Not	
hydrotreated heavy	1111111111111111	l soprimory minument	data are not sufficient for		available	
			classification			
Naphtha (petroleum), hydrotreated heavy	Inhalation	nervous system	Not classified	Dog	NOAEL 6.5 mg/l	4 hours
Naphtha (petroleum),	Ingestion	central nervous	May cause drowsiness or	Professio	NOAEL Not	
hydrotreated heavy	3.0	system depression	dizziness	nal	available	
				judgeme		1
Methylcyclohexane	Inhalation	central nervous	May cause drowsiness or	nt Multiple	NOAEL Not	1
	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	system depression	dizziness	animal	available	
				species	1220/==	ļ
Methylcyclohexane	Inhalation	respiratory irritation	Some positive data exist, but the	Human	NOAEL Not	occupational

			data are not sufficient for classification		available	exposure
Methylcyclohexane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
Limestone	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.812 mg/l	90 minutes
Cyclopentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	similar compoun ds	NOAEL Not available	
Cyclopentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
n-hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
n-hexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL Not available	8 hours
n-hexane	Inhalation	respiratory system	Not classified	Rat	NOAEL 24.6 mg/l	8 hours

**Specific Target Organ Toxicity - repeated exposure** 

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Acetone	Dermal	eyes	Not classified	Guinea pig	NOAEL Not available	3 weeks
Acetone	Inhalation	hematopoietic system	Not classified	Human	NOAEL 3 mg/l	6 weeks
Acetone	Inhalation	immune system	Not classified	Human	NOAEL 1.19 mg/l	6 days
Acetone	Inhalation	kidney and/or bladder	Not classified	Guinea pig	NOAEL 119 mg/l	not available
Acetone	Inhalation	heart   liver	Not classified	Rat	NOAEL 45 mg/l	8 weeks
Acetone	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 900 mg/kg/day	13 weeks
Acetone	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 200 mg/kg/day	13 weeks
Acetone	Ingestion	liver	Not classified	Mouse	NOAEL 3,896 mg/kg/day	14 days
Acetone	Ingestion	eyes	Not classified	Rat	NOAEL 3,400 mg/kg/day	13 weeks
Acetone	Ingestion	respiratory system	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	muscles	Not classified	Rat	NOAEL 2,500 mg/kg	13 weeks
Acetone	Ingestion	skin   bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 11,298 mg/kg/day	13 weeks
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
Pentane	Inhalation	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
Pentane	Inhalation	heart   skin   endocrine system   bone, teeth, nails, and/or hair	Not classified	Rat	NOAEL 20 mg/l	13 weeks

\_\_\_\_\_

	,		1			
		hematopoietic system   liver   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system				
Pentane	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 2,000 mg/kg/day	28 days
Butane	Inhalation	kidney and/or bladder   blood	Not classified	Rat	NOAEL 4,489 ppm	90 days
Isobutane	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 4,500 ppm	13 weeks
2-methylbutane	Inhalation	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
2-methylbutane	Inhalation	heart   skin   endocrine system   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
2-methylbutane	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 2,000 mg/kg/day	28 days
Naphtha (petroleum), hydrotreated heavy	Inhalation	nervous system	Not classified	Rat	LOAEL 4.6 mg/l	6 months
Naphtha (petroleum), hydrotreated heavy	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 1.9 mg/l	13 weeks
Naphtha (petroleum), hydrotreated heavy	Inhalation	respiratory system	Not classified	Multiple animal species	NOAEL 0.6 mg/l	90 days
Naphtha (petroleum), hydrotreated heavy	Inhalation	bone, teeth, nails, and/or hair   blood   liver   muscles	Not classified	Rat	NOAEL 5.6 mg/l	12 weeks
Naphtha (petroleum), hydrotreated heavy	Inhalation	heart	Not classified	Multiple animal species	NOAEL 1.3 mg/l	90 days
Methylcyclohexane	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 1.6 mg/l	12 months
Methylcyclohexane	Inhalation	liver	Not classified	Rabbit	NOAEL 12 mg/l	10 weeks
Limestone	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
n-hexane	Inhalation	peripheral nervous system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
n-hexane	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Mouse	LOAEL 1.76 mg/l	13 weeks
n-hexane	Inhalation	liver	Not classified	Rat	NOAEL Not available	6 months
n-hexane	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 1.76 mg/l	6 months
n-hexane	Inhalation	hematopoietic system	Not classified	Mouse	NOAEL 35.2 mg/l	13 weeks
n-hexane	Inhalation	auditory system   immune system   eyes	Not classified	Human	NOAEL Not available	occupational exposure
n-hexane	Inhalation	heart   skin   endocrine system	Not classified	Rat	NOAEL 1.76 mg/l	6 months
n-hexane	Ingestion	peripheral nervous	Some positive data exist, but the	Rat	NOAEL	90 days

\_\_\_\_\_

		system	data are not sufficient for classification		1,140 mg/kg/day	
n-hexane	Ingestion	endocrine system   hematopoietic system   liver   immune system   kidney and/or bladder	Not classified	Rat	NOAEL Not available	13 weeks

#### **Aspiration Hazard**

Name	Value
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Aspiration hazard
Pentane	Aspiration hazard
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	Aspiration hazard
2-methylbutane	Aspiration hazard
Naphtha (petroleum), hydrotreated heavy	Aspiration hazard
Methylcyclohexane	Aspiration hazard
Cyclopentane	Aspiration hazard
n-hexane	Aspiration hazard

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

## **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 Nbr	Organism	Type	Exposure	Test endpoint	Test result
Nonvolatile components	Trade Secret		Data not available or insufficient for classification			
Acetone	67-64-1	Crustacea other	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	Algae other	Experimental	96 hours	EC50	11,493 mg/l
Acetone	67-64-1	Water flea	Experimental	21 days	NOEC	1,000 mg/l
Propane	74-98-6		Data not available or insufficient for classification			
Butadiene-styrene- meta-divinylbenzene polymer	26471-45-4		Data not available or insufficient for classification			
Dimethyl Ether	115-10-6	Water flea	Experimental	48 hours	EC50	>4,400 mg/l
Dimethyl Ether	115-10-6	Guppy	Experimental	96 hours	LC50	>4,100 mg/l
Resin acids and Rosin acids, hydrogenated, esters with glycerol	65997-13-9	Water flea	Estimated		Effect Level 50%	>100 mg/l
Resin acids and Rosin acids, hydrogenated, esters with glycerol	65997-13-9	Fathead minnow	Estimated		Lethal Level 50%	>100 mg/l

Resin acids and Rosin acids, hydrogenated, esters with glycerol	65997-13-9	Green algae	Estimated		Effect Level 50%	>100 mg/l
Resin acids and Rosin acids, hydrogenated, esters with glycerol	65997-13-9	Green Algae	Estimated		No obs Effect Level	>100 mg/l
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4		Data not available or insufficient for classification			
Butane	106-97-8		Data not available or insufficient for classification			
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	931-254-9		Data not available or insufficient for classification			
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	EC50	10.7 mg/l
Pentane	109-66-0	Green Algae	Experimental	72 hours	NOEC	2.04 mg/l
Isobutane	75-28-5		Data not available or insufficient for classification			
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Green Algae	Estimated	72 hours	Effect Level 50%	3.1 mg/l
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Water flea	Estimated	48 hours	Effect Level 50%	4.5 mg/l
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Fathead minnow	Estimated	96 hours	Lethal Level 50%	8.2 mg/l
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Water flea	Estimated	21 days	No obs Effect Level	2.6 mg/l
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Green Algae	Estimated	72 hours	No obs Effect Level	0.5 mg/l
2-methylbutane	78-78-4		Data not available or insufficient for classification			
Limestone	1317-65-3	Western Mosquitofish	Experimental	96 hours	LC50	>100 mg/l
Limestone	1317-65-3	Rainbow trout	Experimental	42 days	NOEC	>100 mg/l
Cyclopentane	287-92-3	Water flea	Experimental	48 hours	EC50	10.5 mg/l
Methylcyclohexane	108-87-2	Ricefish	Experimental	96 hours	LC50	2.07 mg/l
Methylcyclohexane	108-87-2	Water flea	Experimental	48 hours	EC50	0.326 mg/l
Methylcyclohexane	108-87-2	Green Algae	Experimental	72 hours	EC50	0.134 mg/l
Methylcyclohexane	108-87-2	Green Algae	Experimental	72 hours	NOEC	0.022 mg/l
n-hexane	110-54-3	Fathead minnow	Experimental	96 hours	LC50	2.5 mg/l
n-hexane	110-54-3	Water flea	Experimental	48 hours	LC50	3.9 mg/l

## 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Nonvolatile components	Trade Secret	Experimental Biodegradation	28 days	BOD	0 % weight	OECD 301C - MITI test (I)
Acetone	67-64-1	Experimental Biodegradation	28 days	BOD	78 % weight	OECD 301D - Closed bottle test
Acetone	67-64-1	Experimental		Photolytic half-life	147 days (t 1/2)	Other methods

\_\_\_\_\_\_

		Photolysis		(in air)		
Propane	74-98-6	Experimental Photolysis		Photolytic half-life (in air)	27.5 days (t 1/2)	Other methods
Butadiene-styrene-meta- divinylbenzene polymer	26471-45-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Dimethyl Ether	115-10-6	Experimental Photolysis		Photolytic half-life (in air)	12.4 days (t 1/2)	Other methods
Dimethyl Ether	115-10-6	Experimental Biodegradation	28 days	BOD	5 % weight	OECD 301D - Closed bottle test
Resin acids and Rosin acids, hydrogenated, esters with glycerol	65997-13-9	Experimental Biodegradation	28 days	CO2 evolution	47.3 % weight	OECD 301B - Modified sturm or CO2
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Estimated Biodegradation	28 days	BOD	98 % BOD/ThBOD	OECD 301F - Manometric respirometry
Butane	106-97-8	Experimental Photolysis		Photolytic half-life (in air)	12.3 days (t 1/2)	Other methods
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	931-254-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Pentane	109-66-0	Experimental Biodegradation	28 days	BOD	87 % BOD/ThBOD	OECD 301F - Manometric respirometry
Pentane	109-66-0	Experimental Photolysis		Photolytic half-life (in air)	8.07 days (t 1/2)	Other methods
Isobutane	75-28-5	Experimental Photolysis		Photolytic half-life (in air)	13.4 days (t 1/2)	Other methods
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Estimated Biodegradation	28 days	BOD	10 % BOD/ThBOD	OECD 301D - Closed bottle test
2-methylbutane	78-78-4	Experimental Biodegradation	28 days	BOD	71.43 % BOD/ThBOD	Other methods
2-methylbutane	78-78-4	Experimental Photolysis		Photolytic half-life (in air)	8.11 days (t 1/2)	Other methods
Limestone	1317-65-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Cyclopentane	287-92-3	Experimental Photolysis		Photolytic half-life (in air)	6.11 days (t 1/2)	Other methods
Cyclopentane	287-92-3	Experimental Biodegradation	28 days	BOD	0 % BOD/ThBOD	OECD 301F - Manometric respirometry
Methylcyclohexane	108-87-2	Estimated Photolysis		Photolytic half-life (in air)	3.1 days (t 1/2)	Other methods
Methylcyclohexane	108-87-2	Experimental Biodegradation	28 days	BOD	0 % weight	OECD 301D - Closed bottle test
n-hexane	110-54-3	Experimental Bioconcentration	28 days	BOD	100 % weight	OECD 301C - MITI test (I)
n-hexane	110-54-3	Experimental Photolysis		Photolytic half-life (in air)	5.4 days (t 1/2)	Other methods

## 12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Nonvolatile components	Trade Secret	Estimated BCF- Carp	70 days	Bioaccumulation factor	11100	Other methods
Acetone	67-64-1	Experimental Bioconcentration		Log Kow	-0.24	Other methods
Propane	74-98-6	Experimental Bioconcentration		Log Kow	2.36	Other methods
Butadiene-styrene-meta- divinylbenzene polymer	26471-45-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Dimethyl Ether	115-10-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Resin acids and Rosin acids, hydrogenated, esters with glycerol	65997-13-9	Estimated Bioconcentration		Bioaccumulation factor	7.4	Estimated: Bioconcentration factor

\_\_\_\_\_\_

Hydrocarbons, C7, n-	927-510-4	Data not available	N/A	N/A	N/A	N/A
alkanes, isoalkanes, cyclics		or insufficient for classification				
Butane	106-97-8	Experimental Bioconcentration		Log Kow	2.89	Other methods
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	931-254-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Pentane	109-66-0	Estimated Bioconcentration		Bioaccumulation factor	26	Estimated: Bioconcentration factor
Isobutane	75-28-5	Experimental Bioconcentration		Log Kow	2.76	Other methods
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2-methylbutane	78-78-4	Experimental Bioconcentration		Log Kow	2.3	Other methods
Limestone	1317-65-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Cyclopentane	287-92-3	Experimental Bioconcentration		Log Kow	3.00	Other methods
Methylcyclohexane	108-87-2	Experimental BCF- Carp	56 days	Bioaccumulation factor	<=321	OECD 305E - Bioaccumulation flow- through fish test
n-hexane	110-54-3	Estimated Bioconcentration		Bioaccumulation factor	50	Estimated: Bioconcentration factor

#### 12.4. Mobility in soil

Please contact manufacturer for more details

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

No information available at this time, contact manufacturer for more details

#### 12.6. Other adverse effects

Material	CAS Nbr	<b>Ozone Depletion Potential</b>	Global Warming Potential
acetone	67-64-1	0	

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

See Section 11.1 Information on toxicological effects

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)

08 04 09\* Waste adhesives and sealants containing organic solvents or other dangerous substances

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

Page: 20 of 22

## **SECTION 14: Transportation information**

YP-2080-6014-2, YP-2080-6015-9

ADR/RID: UN1950, AEROSOLS, LIMITED QUANTITY, 2.1, (E), ADR Classification Code: 5F.

IMDG-CODE: UN1950, AEROSOLS, 2.1, IMDG-Code segregation code: NONE, LIMITED QUANTITY, EMS: FD,SU.

ICAO/IATA: UN1950, AEROSOLS, FLAMMABLE, 2.1.

## **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.

#### 15.2. Chemical Safety Assessment

A chemical safety assessment has been carried out for the relevant substances in this material by the registrant 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.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

#### **Revision information:**

Section 12: Component ecotoxicity information information was modified.

#### 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 Application 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 mana	igement 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;					
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	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.					

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.

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