

Safety Data Sheet

Copyright, 2019, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 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:

27-7170-7

Version number:

7.07

Revision date:

02/12/2019

Supersedes date:

01/10/2019

Transportation version number: 2.01 (01/10/2019)

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-2080-6065-4

YP-2080-6067-0

7000116736

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: E Mail: Website:

+44 (0)1344 858 000 tox.uk@mmm.com 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, cyclic	es	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.

P261A Avoid breathing vapours.

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.

Contains 14% 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.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EC No.	REACH Registration No.	% by V	Vt	Classification
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		Aquatic Chronic 2, H411 Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336
Hydrocarbons, C6, isoalkanes, < 5% n-Hexane		931-254-9	01- 2119484651- 34	1 -	7	Aquatic Chronic 2, H411 Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336
pentane	109-66-0	203-692-4	01- 2119459286- 30	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
isopentane	78-78-4	201-142-8	01- 2119475602- 38	0.5 -	2	Flam. Liq. 1, H224; Asp. Tox. 1, H304; STOT SE 3, H336; EUH066; Aquatic

Page: 3 of 2

				Chronic 2, H411
methylcyclohexane	108-87-2	203-624-3	0.5 -	Flam. Liq. 2, H225; Asp.
			1.5	Tox. 1, H304; Skin Irrit. 2,
		1		H315; STOT SE 3, H336;
				Aquatic Chronic 2, H411
cyclopentane	287-92-3	206-016-6	0.5 -	Flam. Liq. 2, H225; Aquatic
			1.5	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.

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

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

Aldehydes.

Condition

During combustion.

Hydrocarbons. formaldehyde Carbon monoxide Carbon dioxide. During combustion.
During combustion.
During combustion.
During combustion.

5.3. Advice for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

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 50°C/122°F. 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.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Butane	106-97-8	UK HSC	TWA: 1450 mg/m ³ (600	
			ppm);STEL:1810 mg/m3(750	
			ppm)	
pentane	109-66-0	UK HSC	TWA:1800 mg/m³(600 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 ³ (400	
			ppm):STEL:958 mg/m3(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	
Rosin	65997-13-9	UK HSC	TWA(as fume):0.05	Respiratory Sensitizer
			mg/m³;STEL(as fume):0.15	
			mg/m³	
acetone	67-64-1	UK HSC	TWA:1210 mg/m ³ (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 ³ (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/m ³
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/m ³

Predicted no effect concentrations (PNEC)

Page: 6 of 23

Ingredient	Degradation Product	Compartment	PNEC
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 No data available No data available

Applicable Norms Standards Use gloves tested to EN 374

Respiratory protection

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

Half facepiece or full facepiece 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

Appearance

Physical state

Colour

Liquid.

Specific Physical Form:

Odor

Odour threshold

pН

Boiling point/boiling range

Melting point

Flammability (solid, gas) **Explosive** properties Oxidising properties

Flash point

Autoignition temperature Flammable Limits(LEL) Flammable Limits(UEL) Vapour pressure

Relative density

Water solubility

Solubility-non-water

Partition coefficient: n-octanol/water **Evaporation rate** Vapour density

Decomposition temperature Viscosity

Density

Transparent White

Aerosol

Strong Ketones No data available.

Not applicable. Not applicable. Not applicable.

Not applicable. Not classified Not classified

-42 °C

No data available. No data available. No data available. No data available.

0.74 [Ref Std: WATER=1]

Nil

No data available. No data available. No data available. ≥ 1 [Ref Std: AIR=1] No data available. Not applicable.

0.74 g/ml

9.2. Other information

EU Volatile Organic Compounds

Percent volatile

No data available. 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 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:

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.

Eve 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

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 other	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, eyelies	Dermal	Rabbit	LD50 > 2,920 mg/kg
Hydrocarbdns, C7, n-alkanes, isoalkanes, cyclics	Inhalation- Vapour (4 hours)	Rat	LC50 > 23.3 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Ingestion	Rat	LD50 > 5,840 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	Rabbit	LD50 > 3,160 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	Inhalation- Vapour (4 hours)	Rat	LC50 > 14.7 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	Ingestion	Rat	LD50 > 5,000 mg/kg
isopentane	Dermal	Rabbit	LD50 3,000 mg/kg
isopentane	Inhalation- Vapour (4 hours)	Rat	LC50 > 18 mg/l
isopentane	Ingestion	Rat	LD50 > 2,000 mg/kg
Naphtha (petroleum), hydrotreated heavy	Inhalation- Vapour		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	Rat Mouse	LD50 > 5.000 mg/kg LC50 26 mg/l
	hours)		

Page: 10 of 23

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
acetone	Niouse	Minimal irritation
propane	Rabbit	Minimal irritation
Butadiene-styrene-meta-divinylbenzene polymer	Professio nal judgemen t	Minimal irritation
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Rabbit	Irritant
pentane	Rabbit	Minimal irritation
Butane	Professio nal judgemen t	No significant irritation
Resin acids and Rosin acids, hydrogenated, esters with glycerol	Rabbit	No significant irritation
Isobutane	Professio nal judgemen t	No significant irritation
Hydrocarbons, C6. isoalkanes, < 5% n- Hexane	Rabbit	Irritant
isopentane	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 and animal	Mild irritant

Serious Eve Damage/Irritation

Name	Species	Value
acetone	Rabbit	Severe irritant
propane	Rabbit	Mild irritant
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Rabbit	Mild irritant
pentane	Rabbit	Mild irritant
Butane	Rabbit	No significant irritation
Resin acids and Rosin acids, hydrogenated, esters with glycerol	Rabbit	Mild irritant
Isobutane	Professio nal judgemen t	No significant irritation
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	Rabbit	Mild irritant
isopentane	Rabbit	Mild irritant
Naphtha (petroleum), hydrotreated heavy	Rabbit	No significant irritation

Page: 11 of 23

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	Guinea pig	Not classified
pentane	Guinea pig	Not classified
Resin acids and Rosin acids, hydrogenated, esters with glycerol	Human and animal	Not classified
Hydrocarbons, C6, isoalkanes, < 5% n-Hexane	Guinea pig	Not classified
isopentane	Guinea pig	Not classified
Naphtha (petroleum), hydrotreated heavy	Guinea pig	Not classified
n-hexanc	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
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	In Vitro	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
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	In Vitro	Not mutagenic
isopentane	In vivo	Not mutagenic
isopentane	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 specified.	Multiple animal species	Not carcinogenic
dimethyl ether	Inhalation	Rat	Not carcinogenic
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Naphtha (petroleum), hydrotreated heavy	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Naphtha (petroleum), hydrotreated heavy	Inhalation	Human and animal	Some positive data exist, but the data are not sufficient for classification

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
acelone	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, evelies	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	2 generation
Hydrocarbons, C7, n-alkanes, isoalkanes, eyelies	Not specified.	Not classified for development	Rat	NOAEL Not available	2 generation
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
isopentane	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during organogenesis
isopentane	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	May cause drowsiness or	Human	NOAEL Not	poisoning

Page: 13 of 23

	1	system depression	dizziness	 	available	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	<u> </u>
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	
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
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	-
sobutane	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	
Hydrocarbons, C6, soalkanes, < 5% n- Hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Hydrocarbons, C6, soalkanes, < 5% n- Hexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
sopentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
sopentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL Not available	not available
sopentane	Inhalation	cardiac sensitisation	Not classified	Dog	NOAEL Not available	not available
sopentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	not available
Naphtha (petroleum), nydrotreated heavy	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Naphtha (petroleum), nydrotreated heavy	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	

Page: 14 of 23

Naphtha (petroleum), hydrotreated heavy	Inhalation	nervous system	Not classified	Dog	NOAEL 6.5 mg/l	4 hours
Naphtha (petroleum), hydrotreated heavy	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
methylcyclohexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	
methylcyclohexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational 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

Page: 15 of 23

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 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
Butane	Inhalation	kidney and/or bladder blood	Not classified	Rat	NOAEL 4,489 ppm	90 days
sobutane	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 4,500 ppm	13 weeks
sopentane	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
sopentane	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), nydrotreated heavy	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 1.9 mg/l	13 weeks
Naphtha (petroleum), nydrotreated heavy	Inhalation	respiratory system	Not classified	Multiple animal species	NOAEL 0.6 mg/l	90 days
Naphtha (petroleum), nydrotreated heavy	Inhalation	bone, teeth, nails, and/or hair blood liver muscles	Not classified	Rat	NOAEL 5.6 mg/l	12 weeks
Naphtha (petroleum), nydrotreated heavy	Inhalation	heart	Not classified	Multiple animal species	NOAEL 1.3 mg/l	90 days
nethylcyclohexane	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 1.6 mg/l	12 months
nethylcyclohexane	Inhalation	liver	Not classified	Rabbit	NOAEL 12 mg/l	10 weeks
Limestone	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
i-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

Page: 16 of 23

n-hexane	Inhalation	liver	Not classified	Rat	NOAEL Not available	6 months
n-hexane	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 1.76 mg/l	6 months
n-hexane	Inhalation	hematopoietic system	Not classified	Mouse	NOAEL 35.2 mg/l	13 weeks
n-hexane	Inhalation	auditory system immune system eyes	Not classified	Human	NOAEL Not available	occupational exposure
n-hexane	Inhalation	heart skin endocrine system	Not classified	Rat	NOAEL 1.76 mg/l	6 months
n-hexane	Ingestion	peripheral nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,140 mg/kg/day	90 days
n-hexane	Ingestion	endocrine system hematopoietic system liver immune system kidney and/or bladder	Not classified	Rat	NOAEL Not available	13 weeks

Aspiration Hazard

Name	Value	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Aspiration hazard	
pentane	Aspiration hazard	
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	Aspiration hazard	
isopentane	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#	Organism	Type	Exposure	Test endpoint	Test result
Nonvolatile components	Trade Secret		Data not available or insufficient for classification			
acetone	67-64-1	Algae other	Experimental	96 hours	EC50	11,493 mg/l
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	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	26471-45-4		Data not available or insufficient for			

Page: 17 of 23

polymer			classification			
dimethyl ether	115-10-6	Guppy	Experimental	96 hours	LC50	>4,100 mg/l
limethyl ether	115-10-6	Water flea	Experimental	48 hours	EC50	>4,400 mg/l
Resin acids and Rosin acids, hydrogenated, esters with glycerol	65997-13-9	Green algae	Estimated	72 hours	No tox obs at lmt of water sol	>100 mg/l
Resin acids and Rosin acids, hydrogenated, esters with glycerol	65997-13-9	Rainbow trout	Estimated	96 hours	No tox obs at lmt of water sol	>100 mg/l
Resin acids and Rosin acids, hydrogenated, esters with glycerol	65997-13-9	Water flea	Estimated	48 hours	No tox obs at lmt of water sol	>100 mg/l
Resin acids and Rosin icids, hydrogenated, esters with glycerol	65997-13-9	Green Algae	Estimated	72 hours	No tox obs at lmt of water sol	>100 mg/l
lydrocarbons, C7, n- lkanes, isoalkanes, cyclics	927-510-4	Green Algae	Estimated	72 hours	Effect Level 50%	29 mg/l
Aydrocarbons, C7, n- alkanes, isoalkanes, eyelies	927-510-4	Water flea	Estimated	48 hours	Effect Level 50%	3 mg/l
Hydrocarbons, C7, n- ilkanes, isoalkanes, cyclics	927-510-4	Rainbow trout	Experimental	96 hours	Lethal Level 50%	>13.4 mg/l
Hydrocarbons, C7, n- ilkanes, isoalkanes, cyclics	927-510-4	Green Algae	Estimated	72 hours	No obs Effect Level	6.3 mg/l
Tydrocarbons, C7, n- ilkanes, isoalkanes, cyclics	927-510-4	Water flea	Estimated	21 days	No obs Effect Level	l mg/l
Butane	106-97-8		Data not available or insufficient for classification			-
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	931-254-9	Green algae	Estimated	72 hours	Effect Level 50%	55 mg/l
Hydrocarbons, C6, soalkanes, < 5% n- Hexane	931-254-9	Water flea	Estimated	48 hours	LC50	3,9 mg/l
Hydrocarbons, C6, soalkanes, < 5% n- Hexane	931-254-9	Green Algae	Estimated	72 hours	No obs Effect Level	30 mg/l
pentane	109-66-0	Green Algae	Experimental	72 hours	EC50	10.7 mg/l
entane	109-66-0	Rainbow trout	Experimental	96 hours	LC50	4.26 mg/l
entane	109-66-0	Water flea	Experimental	48 hours	EC50	2.7 mg/l
entane	109-66-0	Green Algae	Experimental	72 hours	NOEC	2.04 mg/l
sobutane	75-28-5		Data not available or insufficient for classification			
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Fathead minnow	Estimated	96 hours	Lethal Level 50%	8.2 mg/l
laphtha (petroleum), ydrotreated 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), ydrotreated heavy	64742-48-9	Green Algae	Estimated	72 hours	No obs Effect Level	0.5 mg/l
Naphtha (petroleum), nydrotreated heavy	64742-48-9	Water flea	Estimated	21 days	No obs Effect Level	2.6 mg/l
sopentane	78-78-4		Data not available or insufficient for	-		

			classification			
Limestone	1317-65-3	Green algae	Estimated	72 hours	EC50	>100 mg/l
Limestone	1317-65-3	Rainbow trout	Estimated	96 hours	LC50	>100 mg/l
Limestone	1317-65-3	Water flea	Estimated	48 hours	EC50	>100 mg/l
Limestone	1317-65-3	Green algae	Estimated	72 hours	Effect Concentration 10%	>100 mg/l
cyclopentane	287-92-3	Water flea	Experimental	48 hours	EC50	10.5 mg/l
methylcyclohexane	108-87-2	Green Algae	Experimental	72 hours	EC50	0.134 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	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 Photolysis		Photolytic half-life (in air)	147 days (t 1/2)	
acetone	67-64-1	Experimental Biodegradation	28 days	BOD	78 % weight	OECD 301D - Closed bottle test
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 availbl- insufficient			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
hydrogenated, esters with glycerol	65997-13-9	Experimental Biodegradation	28 days	CO2 evolution	47.3 %CO2 evolution/THC O2 evolution	OECD 301B - Modified sturm or CO2
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics	927-510-4	Estimated Biodegradation	28 days	BOD	98 %BOD/CO D	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	Estimated Biodegradation	28 days	BOD	98 %BOD/CO D	OECD 301F - Manometric respirometry
pentane	109-66-0	Experimental Photolysis		Photolytic half-life (in air)	8.07 days (t 1/2)	Other methods
pentane	109-66-0	Experimental Biodegradation	28 days	BOD	87 % BOD/ThBOD	OECD 301F - Manometric respirometry
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
isopentane	78-78-4	Experimental Photolysis		Photolytic half-life (in air)	8.11 days (t 1/2)	Other methods
isopentane	78-78-4	Experimental Biodegradation	28 days	BOD	71.43 % BOD/ThBOD	Other methods
Limestone	1317-65-3	Data not availbl- insufficient			N/A	
cyclopentane	287-92-3	Experimental		Photolytic half-life	6.11 days (t	Other methods

Page: 19 of 23

		Photolysis		(in air)	1/2)	1
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)	
methylcyclohexane	108-87-2	Experimental Biodegradation	28 days	BOD	0 % weight	OECD 301D - Closed bottle test
n-hexane	110-54-3	Experimental Photolysis		Photolytic half-life (in air)	5.4 days (t 1/2)	Other methods
n-hexane	110-54-3	Experimental Bioconcentration	28 days	BOD	100 % weight	OECD 301C - MITI test (I)

12.3: Bioaccumulative potential

Material	Cas No.	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- alkanes, isoalkanes, cyclics	927-510-4	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	Other methods
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	931-254-9	Estimated Bioconcentration		Log Kow	3.6	Other methods
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
isopentane	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

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

9

12.6. Other adverse effects

Material	CAS Nbr	Ozone Depletion Potential	Global Warming Potential
	67-64-1	0	

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

EU waste code (product container after use)

15 01 04 Metallic packaging

SECTION 14: Transportation information

YP-2080-6065-4, YP-2080-6067-0

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

15.2. Chemical Safety Assessment

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

SECTION 16: Other information

List of relevant H statements

EUH066 Repeated exposure may cause skin dryness or cracking.

Page: 21 of 23

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:

CLP: Ingredient table information was modified.

- Section 3: Composition/Information of ingredients table information was modified.
- Section 5: Hazardous combustion products table information was modified.
- Section 7: Conditions safe storage information was modified.
- Section 8: Occupational exposure limit table information was modified.
- Section 11: Acute Toxicity table information was modified.
- Section 11: Aspiration Hazard Table information was modified.
- Section 11: Carcinogenicity Table information was modified.
- Section 11: Germ Cell Mutagenicity Table information was modified.
- Section 11: Reproductive Toxicity Table information was modified.
- 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 modified.
- Section 11: Target Organs Single Table information was modified.
- Section 12: Component ecotoxicity information information was modified.
- Section 12: Persistence and Degradability information information was modified.
- Section 12:Bioccumulative potential information information was modified.
- Sectio 16: UK disclaimer information was deleted.

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 man				
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;			
100	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. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

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

Page: 23 of 23

