

Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006), as amended for GB.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

3M SprayMount Adhesive.

Product Identification Numbers

UU-0120-6692-2 YP-2080-6050-6 YP-2080-6054-8

7000116723 7000116727 7100296969

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

The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

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

The aspiration hazard classification is not required because the product is an aerosol.

CLASSIFICATION:

Aerosol, Category 1 - Aerosol 1; H222, H229

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

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

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

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

For full text of H phrases, see Section 16.

2.2. Label elements

The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

SIGNAL WORD

DANGER.

Symbols

GHS02 (Flame) |GHS07 (Exclamation mark) |

Pictograms





Ingredient	CAS Nbr	EC No.	% by Wt
acetone	67-64-1	200-662-2	25 - 40
butane	106-97-8	203-448-7	10 - 20
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		927-510-4	10 - 20
propane	74-98-6	200-827-9	10 - 20
Hydrocarbons, C6, isoalkanes, < 5% n- hexane		931-254-9	5 - 10
isobutane	75-28-5	200-857-2	5 - 10
Non-volatiles	Trade Secret		5 - 10
pentane	109-66-0	203-692-4	1 - 5
Non Volatile Component	Trade Secret		1 - 5
isopentane	78-78-4	201-142-8	0.5 - 2

HAZARD STATEMENTS:

H222 Extremely flammable aerosol.

H229 Pressurised container: may burst if heated.

H315 Causes skin irritation.

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

H412 Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

General:

P102 Keep out of reach of children.

Prevention:

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

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

Dagger 2 of 12

P251 Do not pierce or burn, even after use.

P261A Avoid breathing vapours.

Response:

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

present and easy to do. Continue rinsing.

Storage:

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

Disposal:

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

regulations.

2.3. Other hazards

May displace oxygen and cause rapid suffocation.

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB
acetone	(CAS-No.) 67-64-1 (EC-No.) 200-662-2	25 - 40	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
butane	(CAS-No.) 106-97-8 (EC-No.) 203-448-7	10 - 20	Flam. Gas 1A, H220 Liquified gas, H280 Nota C,U
propane	(CAS-No.) 74-98-6 (EC-No.) 200-827-9	10 - 20	Flam. Gas 1A, H220 Liquified gas, H280 Nota U
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	(EC-No.) 927-510-4	10 - 20	Aquatic Chronic 2, H411 Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336
Non-volatiles Hydrocarbons, C6, isoalkanes, < 5% n-hexane	Trade Secret (EC-No.) 931-254-9	5 - 10 5 - 10	Substance not classified as hazardous Aquatic Chronic 2, H411 Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336
isobutane	(CAS-No.) 75-28-5 (EC-No.) 200-857-2	5 - 10	Flam. Gas 1A, H220 Liquified gas, H280 Nota C,U
Non Volatile Component	Trade Secret	1 - 5	Aquatic Chronic 4, H413

pentane	(CAS-No.) 109-66-0 (EC-No.) 203-692-4	1 - 5	Flam. Liq. 2, H225 Asp. Tox. 1, H304
			STOT SE 3, H336 EUH066
			Aquatic Chronic 2, H411 Nota C
isopentane	(CAS-No.) 78-78-4 (EC-No.) 201-142-8	0.5 - 2	Flam. Liq. 1, H224 Asp. Tox. 1, H304 STOT SE 3, H336 EUH066 Aquatic Chronic 2, H411

Any entry in the Identifier(s) column that begins with the numbers 6, 7, 8, or 9 are a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance.

Please see section 16 for the full text of any H statements referred to in this section

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. Get medical attention.

Skin contact

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

Eve contact

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

If swallowed

Do not induce vomiting. Get immediate medical attention.

4.2. Most important symptoms and effects, both acute and delayed

The most important symptoms and effects based on the GB CLP classification include:

Irritation to the skin (localized redness, swelling, itching, and dryness). Serious irritation to the eyes (significant redness, swelling, pain, tearing, and impaired vision). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness).

4.3. Indication of any immediate medical attention and special treatment required

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

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish. Water spray or fog may be used. Do not use straight streams.

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. Hydrocarbons. 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

Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage including any incompatibilities

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

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

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

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
butane	106-97-8	UK HSC	TWA:1450 mg/m³(600 ppm);STEL:1810 mg/m³(750 ppm)	
pentane	109-66-0	UK HSC	TWA:1800 mg/m ³ (600 ppm)	
acetone	67-64-1	UK HSC	TWA:1210 mg/m³(500 ppm);STEL:3620 mg/m³(1500 ppm)	
propane	74-98-6	UK HSC	Limit value not established:	asphyxiant
isopentane	78-78-4	UK HSC	TWA:1800 mg/m 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.

8.2. Exposure controls

8.2.1. Engineering controls

Use in a well-ventilated area. 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
Butyl rubber.	No data available	No data available
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 air-purifying respirator suitable for organic vapours and particulates

Half facepiece or full facepiece supplied-air respirator

Organic vapor cartridges may have short service life.

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

Use a respirator conforming to EN 140 or EN 136: filter types A & P

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.		
Specific Physical Form:	Aerosol		
Colour	Transparent White		
Odor	Strong Ketones		
Odour threshold	No data available.		
Melting point/freezing point	Not applicable.		
Boiling point/boiling range	Not applicable.		
Flammability	Flammable Aerosol: Category 1.		
Flammable Limits(LEL)	No data available.		
Flammable Limits(UEL)	No data available.		
Flash point	-46 °C [Test Method:Closed Cup]		
Autoignition temperature	No data available.		
Decomposition temperature	No data available.		
рН	substance/mixture is non-soluble (in water)		
Kinematic Viscosity	Not applicable.		
Water solubility	Negligible		
Solubility- non-water	No data available.		
Partition coefficient: n-octanol/water	No data available.		
Vapour pressure	No data available.		
Density	0.706 g/ml		
Relative density	0.706 [<i>Ref Std:</i> WATER=1]		
Relative Vapour Density	Not applicable.		
Particle Characteristics	Not applicable.		

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds 88.5 %

Evaporation rate *No data available.*

Percent volatile 88.5 %

SECTION 10: Stability and reactivity

10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Heat.

Sparks and/or flames.

10.5 Incompatible materials

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 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 hazard classes as defined in the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.

Signs and Symptoms of Exposure

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

Inhalation

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

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

Chemical (aspiration) pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish coloured skin (cyanosis), and may be fatal. Gastrointestinal irritation: Signs/symptoms may

include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

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

Toxicological Data

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

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation- Vapour(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
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
butane	Inhalation- Gas (4 hours)	Rat	LC50 277,000 ppm
isobutane	Inhalation- Gas (4 hours)	Rat	LC50 276,000 ppm
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Dermal	Rabbit	LD50 > 2,920 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Dermal	Rabbit	LD50 > 3,160 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Dermal	Rabbit	LD50 > 3,160 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Dermal	Rat	LD50 > 2,000 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation- Vapour (4 hours)	Rat	LC50 > 14.7 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation- Vapour (4 hours)	Rat	LC50 > 23.3 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation- Vapour (4 hours)	Rat	LC50 > 5.61 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Ingestion	Rat	LD50 > 5,000 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Ingestion	Rat	LD50 > 5,840 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Ingestion	Rat	LD50 > 5,000 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Dermal	Rabbit	LD50 > 2,920 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Dermal	Rabbit	LD50 > 3,160 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Dermal	Rabbit	LD50 > 3,160 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Dermal	Rat	LD50 > 2,000 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation- Vapour (4 hours)	Rat	LC50 > 14.7 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation- Vapour (4 hours)	Rat	LC50 > 23.3 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation- Vapour (4	Rat	LC50 > 5.61 mg/l

	hours)		
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Ingestion	Rat	LD50 > 5,000 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Ingestion	Rat	LD50 > 5,840 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Ingestion	Rat	LD50 > 5,000 mg/kg
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
Non-volatiles	Dermal		LD50 estimated to be > 5,000 mg/kg
Non-volatiles	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Non Volatile Component	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
Non Volatile Component	Ingestion	Rat	LD50 > 2,000 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

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
acetone	Mouse	Minimal irritation
propane	Rabbit	Minimal irritation
butane	Professio nal judgemen t	No significant irritation
isobutane	Professio nal judgemen t	No significant irritation
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Rabbit	Irritant
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Rabbit	Irritant
pentane	Rabbit	Minimal irritation
Non-volatiles	Professio nal judgemen t	No significant irritation
Non Volatile Component	In vitro data	No significant irritation
isopentane	Rabbit	Minimal irritation

Serious Eve Damage/Irritation

Name	Species	Value
acetone	Rabbit	Severe irritant
propane	Rabbit	Mild irritant
butane	Rabbit	No significant irritation
isobutane	Professio	No significant irritation
	nal	
	judgemen	
	t	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Rabbit	No significant irritation
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Rabbit	Mild irritant
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Rabbit	No significant irritation
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Rabbit	Mild irritant
pentane	Rabbit	Mild irritant
Non Volatile Component	In vitro	No significant irritation

	data	
isopentane	Rabbit	Mild irritant

Skin Sensitisation

Name	Species	Value
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Guinea	Not classified
	pig	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Guinea	Not classified
	pig	
pentane	Guinea	Not classified
	pig	
Non-volatiles	Professio	Not classified
	nal	
	judgemen	
	t	
Non Volatile Component	Multiple	Not classified
	animal	
	species	
isopentane	Guinea	Not classified
	pig	

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
butane	In Vitro	Not mutagenic
isobutane	In Vitro	Not mutagenic
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	In Vitro	Not mutagenic
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	In Vitro	Not mutagenic
pentane	In vivo	Not mutagenic
pentane	In Vitro	Some positive data exist, but the data are not sufficient for classification
Non Volatile Component	In Vitro	Not mutagenic
isopentane	In vivo	Not mutagenic
isopentane	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
acetone	Not specified.	Multiple animal species	Not carcinogenic
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification

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	during

				mg/l	organogenesis
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	2 generation
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	2 generation
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Not specified.	Not classified for development	Rat	NOAEL Not available	2 generation
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	2 generation
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	2 generation
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	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

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	
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	
isobutane	Inhalation	cardiac sensitisation	Causes damage to organs	Multiple animal species	NOAEL Not available	
isobutane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
isobutane	Inhalation	respiratory irritation	Not classified	Mouse	NOAEL Not available	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	

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Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
pentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
pentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL Not available	not available
pentane	Inhalation	cardiac sensitisation	Not classified	Dog	NOAEL Not available	not available
pentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	not available
isopentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
isopentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL Not available	not available
isopentane	Inhalation	cardiac sensitisation	Not classified	Dog	NOAEL Not available	not available
isopentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	not available

Specific Target Organ Toxicity - repeated exposure

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

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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
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
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
Non Volatile Component	Ingestion	heart gastrointestinal tract hematopoietic system liver nervous system eyes kidney and/or bladder	Not classified	Rat	NOAEL 331 mg/kg/day	90 days
isopentane	Inhalation	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
isopentane	Inhalation	heart skin endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system liver immune system muscles nervous system eyes kidney and/or bladder respiratory system	Not classified	Rat	NOAEL 20 mg/l	13 weeks
isopentane	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 2,000 mg/kg/day	28 days

Aspiration Hazard

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

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

11.2. Information on other hazards

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

SECTION 12: Ecological information

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

12.1. Toxicity

No product test data available.

Material	CAS#	Organism	Type	Exposure	Test endpoint	Test result
acetone	67-64-1	Algae or other aquatic plants	Experimental	96 hours	EC50	11,493 mg/l
acetone	67-64-1	Invertebrate	Experimental	24 hours	LC50	2,100 mg/l
acetone	67-64-1	Rainbow trout	Experimental	96 hours	LC50	5,540 mg/l
acetone	67-64-1	Water flea	Experimental	21 days	NOEC	1,000 mg/l
acetone	67-64-1	Bacteria	Experimental	16 hours	NOEC	1,700 mg/l
acetone	67-64-1	Redworm	Experimental	48 hours	LC50	>100
butane	106-97-8	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Green algae	Analogous Compound	72 hours	EL50	29 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Medaka	Analogous Compound	96 hours	LC50	0.561 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Water flea	Analogous Compound	48 hours	EC50	0.4 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Fathead minnow	Estimated	96 hours	LL50	8.2 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Green algae	Estimated	72 hours	EL50	3.1 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Green algae	Estimated	72 hours	EL50	29 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Green algae	Estimated	72 hours	EL50	55 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Water flea	Estimated	48 hours	EL50	3 mg/l

Hydrocarbons, C7,	927-510-4	Water flea	Estimated	48 hours	EL50	4.5 mg/l
n-alkanes,						
isoalkanes, cyclics						
Hydrocarbons, C7,	927-510-4	Water flea	Estimated	48 hours	LC50	3.9 mg/l
n-alkanes,	927-310-4	water fied	Estimated	46 110015	LC30	3.9 Hig/1
isoalkanes, cyclics						
Hydrocarbons, C7,	927-510-4	Rainbow trout	Experimental	96 hours	LL50	>13.4 mg/l
n-alkanes,						
isoalkanes, cyclics						
	927-510-4	Green algae	Analogous	72 hours	NOEL	6.3 mg/l
n-alkanes,	27 310 1	Green algae	Compound	/2 Hours	TOLL	0.5 mg/1
isoalkanes, cyclics			Compound			
	005 510 4	XXX	1	0.1.1	NORG	0.15
Hydrocarbons, C7,	927-510-4	Water flea	Analogous	21 days	NOEC	0.17 mg/l
n-alkanes,			Compound			
isoalkanes, cyclics						
Hydrocarbons, C7,	927-510-4	Green algae	Estimated	72 hours	NOEL	0.5 mg/l
n-alkanes,		J				" " " "
isoalkanes, cyclics						
	027 510 4	C 1	F (' / 1	70.1	NOEL	(2 //
, ,	927-510-4	Green algae	Estimated	72 hours	NOEL	6.3 mg/l
n-alkanes,						
isoalkanes, cyclics						
Hydrocarbons, C7,	927-510-4	Green algae	Estimated	72 hours	NOEL	30 mg/l
n-alkanes,	1	3				~
isoalkanes, cyclics	1					
	027 510 4	Water flea	Estimate 1	21 days-	NOEL	1 m a/l
Hydrocarbons, C7,	927-510-4	water nea	Estimated	21 days	NOEL	1 mg/l
n-alkanes,	1					
isoalkanes, cyclics						
Hydrocarbons, C7,	927-510-4	Water flea	Estimated	21 days	NOEL	2.6 mg/l
n-alkanes.						
isoalkanes, cyclics						
	927-510-4	Activated sludge	Analogous	15 hours	IC50	29 mg/l
	927-310-4	Activated studge		13 Hours	1030	29 mg/1
n-alkanes,			Compound			
isoalkanes, cyclics						
propane	74-98-6	N/A	Data not available	N/A	N/A	N/A
	I	1	or insufficient for	1	1	i
1			of insufficient for			
			classification			
Hydrocarbons C6	931-254-9	Green algae	classification	72 hours	EL50	29 mg/l
Hydrocarbons, C6,	931-254-9	Green algae	classification Analogous	72 hours	EL50	29 mg/l
isoalkanes, < 5% n-		Green algae	classification	72 hours	EL50	29 mg/l
isoalkanes, < 5% n- hexane			classification Analogous Compound			
isoalkanes, < 5% n- hexane Hydrocarbons, C6,	931-254-9	Green algae Medaka	classification Analogous Compound Analogous	72 hours 96 hours	EL50 LC50	29 mg/l 0.561 mg/l
isoalkanes, < 5% n- hexane	931-254-9		classification Analogous Compound			
isoalkanes, < 5% n- hexane Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9		classification Analogous Compound Analogous			
isoalkanes, < 5% n- hexane Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Medaka	classification Analogous Compound Analogous Compound	96 hours	LC50	0.561 mg/l
isoalkanes, < 5% n- hexane Hydrocarbons, C6, isoalkanes, < 5% n- hexane Hydrocarbons, C6,	931-254-9 931-254-9		classification Analogous Compound Analogous Compound Analogous Analogous			
isoalkanes, < 5% n- hexane Hydrocarbons, C6, isoalkanes, < 5% n- hexane Hydrocarbons, C6, isoalkanes, < 5% n-	931-254-9 931-254-9	Medaka	classification Analogous Compound Analogous Compound	96 hours	LC50	0.561 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9	Medaka Water flea	classification Analogous Compound Analogous Compound Analogous Compound Compound	96 hours 48 hours	LC50 EC50	0.561 mg/l 0.4 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6,	931-254-9 931-254-9	Medaka	classification Analogous Compound Analogous Compound Analogous Analogous	96 hours	LC50	0.561 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9	Medaka Water flea	classification Analogous Compound Analogous Compound Analogous Compound Compound	96 hours 48 hours	LC50 EC50	0.561 mg/l 0.4 mg/l
isoalkanes, < 5% n- hexane Hydrocarbons, C6, isoalkanes, < 5% n- hexane Hydrocarbons, C6, isoalkanes, < 5% n- hexane Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow	classification Analogous Compound Analogous Compound Analogous Compound Estimated	96 hours 48 hours	LC50 EC50 LL50	0.561 mg/l 0.4 mg/l 8.2 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9	Medaka Water flea	classification Analogous Compound Analogous Compound Analogous Compound Compound	96 hours 48 hours	LC50 EC50	0.561 mg/l 0.4 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6,	931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow	classification Analogous Compound Analogous Compound Analogous Compound Estimated	96 hours 48 hours 96 hours	LC50 EC50 LL50	0.561 mg/l 0.4 mg/l 8.2 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow	classification Analogous Compound Analogous Compound Analogous Compound Estimated	96 hours 48 hours 96 hours	LC50 EC50 LL50	0.561 mg/l 0.4 mg/l 8.2 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated	96 hours 48 hours 96 hours 72 hours	LC50 EC50 LL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6,	931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow	classification Analogous Compound Analogous Compound Analogous Compound Estimated	96 hours 48 hours 96 hours	LC50 EC50 LL50	0.561 mg/l 0.4 mg/l 8.2 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated	96 hours 48 hours 96 hours 72 hours	LC50 EC50 LL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae Green algae	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated Estimated	96 hours 48 hours 96 hours 72 hours	LC50 EC50 LL50 EL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l 29 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated	96 hours 48 hours 96 hours 72 hours	LC50 EC50 LL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae Green algae	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated Estimated	96 hours 48 hours 96 hours 72 hours	LC50 EC50 LL50 EL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l 29 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae Green algae	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated Estimated	96 hours 48 hours 96 hours 72 hours	LC50 EC50 LL50 EL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l 29 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae Green algae Green algae	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated Estimated Estimated	96 hours 48 hours 96 hours 72 hours 72 hours	LC50 EC50 LL50 EL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l 29 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6,	931-254-9 931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae Green algae	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated Estimated	96 hours 48 hours 96 hours 72 hours	LC50 EC50 LL50 EL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l 29 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae Green algae Green algae	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated Estimated Estimated	96 hours 48 hours 96 hours 72 hours 72 hours	LC50 EC50 LL50 EL50 EL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l 29 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae Green algae Green algae Water flea	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated Estimated Estimated Estimated	96 hours 48 hours 96 hours 72 hours 72 hours 48 hours	EC50 EL50 EL50 EL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l 29 mg/l 55 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae Green algae Green algae	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated Estimated Estimated	96 hours 48 hours 96 hours 72 hours 72 hours	LC50 EC50 LL50 EL50 EL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l 29 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae Green algae Green algae Water flea	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated Estimated Estimated Estimated	96 hours 48 hours 96 hours 72 hours 72 hours 48 hours	EC50 EL50 EL50 EL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l 29 mg/l 55 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae Green algae Green algae Water flea	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated Estimated Estimated Estimated	96 hours 48 hours 96 hours 72 hours 72 hours 48 hours	EC50 EL50 EL50 EL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l 29 mg/l 55 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae Green algae Water flea Water flea	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated Estimated Estimated Estimated Estimated	96 hours 48 hours 96 hours 72 hours 72 hours 48 hours 48 hours	EC50 EL50 EL50 EL50 EL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l 29 mg/l 55 mg/l 4.5 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae Green algae Green algae Water flea	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated Estimated Estimated Estimated	96 hours 48 hours 96 hours 72 hours 72 hours 48 hours	EC50 EL50 EL50 EL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l 29 mg/l 55 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae Green algae Water flea Water flea	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated Estimated Estimated Estimated Estimated	96 hours 48 hours 96 hours 72 hours 72 hours 48 hours 48 hours	EC50 EL50 EL50 EL50 EL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l 29 mg/l 55 mg/l 4.5 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae Green algae Water flea Water flea Water flea	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated Estimated Estimated Estimated Estimated Estimated	96 hours 48 hours 96 hours 72 hours 72 hours 48 hours 48 hours	EC50 EL50 EL50 EL50 EL50 EL50 EL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l 29 mg/l 55 mg/l 4.5 mg/l 3.9 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae Green algae Water flea Water flea	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated Estimated Estimated Estimated Estimated	96 hours 48 hours 96 hours 72 hours 72 hours 48 hours 48 hours	EC50 EL50 EL50 EL50 EL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l 29 mg/l 55 mg/l 4.5 mg/l
isoalkanes, < 5% n-hexane Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9 931-254-9 931-254-9 931-254-9 931-254-9 931-254-9 931-254-9	Medaka Water flea Fathead minnow Green algae Green algae Water flea Water flea Water flea	classification Analogous Compound Analogous Compound Analogous Compound Estimated Estimated Estimated Estimated Estimated Estimated Estimated	96 hours 48 hours 96 hours 72 hours 72 hours 48 hours 48 hours	EC50 EL50 EL50 EL50 EL50 EL50 EL50 EL50	0.561 mg/l 0.4 mg/l 8.2 mg/l 3.1 mg/l 29 mg/l 55 mg/l 4.5 mg/l 3.9 mg/l

hexane						
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Green algae	Analogous Compound	72 hours	NOEL	6.3 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Water flea	Analogous Compound	21 days	NOEC	0.17 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Green algae	Estimated	72 hours	NOEL	0.5 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Green algae	Estimated	72 hours	NOEL	6.3 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Green algae	Estimated	72 hours	NOEL	30 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Water flea	Estimated	21 days	NOEL	1 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Water flea	Estimated	21 days	NOEL	2.6 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Activated sludge	Analogous Compound	15 hours	IC50	29 mg/l
isobutane	75-28-5	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Non-volatiles	Trade Secret	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Non Volatile Component	Trade Secret	Activated sludge	Experimental	3 hours	NOEC	1,000 mg/l
Non Volatile Component	Trade Secret	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
Non Volatile Component	Trade Secret	Water flea	Endpoint not reached	21 days	EL10	>100 mg/l
pentane	109-66-0	Green algae	Experimental	72 hours	EC50	10.7 mg/l
pentane	109-66-0	Rainbow trout	Experimental	96 hours	LC50	4.26 mg/l
pentane	109-66-0	Water flea	Experimental	48 hours	EC50	2.7 mg/l
pentane	109-66-0	Green algae	Experimental	72 hours	NOEC	2.04 mg/l
isopentane	78-78-4	N/A	Data not available or insufficient for classification	N/A	N/A	N/A

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
acetone	67-64-1	Experimental Biodegradation	28 days	BOD	78 %BOD/ThOD	OECD 301D - Closed bottle test
acetone	67-64-1	Experimental Photolysis		Photolytic half-life (in air)	147 days (t 1/2)	
butane	106-97-8	Experimental Photolysis		Photolytic half-life (in air)	12.3 days (t 1/2)	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Analogous Compound Biodegradation	28 days	BOD	74.4 %BOD/ThOD	OECD 301F - Manometric respirometry
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Estimated Biodegradation	28 days	BOD	98 %BOD/COD	OECD 301F - Manometric respirometry
Hydrocarbons, C7, n-alkanes,	927-510-4	Estimated Biodegradation	28 days	BOD	77 %BOD/ThOD	OECD 301F - Manometric respirometry

isoalkanes, cyclics						
Hydrocarbons, C7,	927-510-4	Estimated	28 days	BOD	98 %BOD/COD	OECD 301F - Manometric
n-alkanes,		Biodegradation				respirometry
isoalkanes, cyclics		ļ				
propane	74-98-6	Experimental		Photolytic half-life	27.5 days (t 1/2)	
		Photolysis		(in air)		
, ,	931-254-9	Analogous	28 days	BOD	74.4 %BOD/ThOD	OECD 301F - Manometric
isoalkanes, < 5% n-		Compound				respirometry
hexane		Biodegradation				
Hydrocarbons, C6,	931-254-9	Estimated	28 days	BOD	98 %BOD/COD	OECD 301F - Manometric
isoalkanes, < 5% n-		Biodegradation				respirometry
hexane						
Hydrocarbons, C6,	931-254-9	Estimated	28 days	BOD	77 %BOD/ThOD	OECD 301F - Manometric
isoalkanes, < 5% n-		Biodegradation				respirometry
hexane						
Hydrocarbons, C6,	931-254-9	Estimated	28 days	BOD	98 %BOD/COD	OECD 301F - Manometric
isoalkanes, < 5% n-		Biodegradation				respirometry
hexane						
isobutane	75-28-5	Experimental		Photolytic half-life	13.4 days (t 1/2)	
		Photolysis		(in air)		
Non-volatiles	Trade Secret	Data not availbl-	N/A	N/A	N/A	N/A
		insufficient				
Non Volatile	Trade Secret	Experimental	28 days	BOD	4 %BOD/ThOD	OECD 301D - Closed bottle
Component		Biodegradation				test
pentane	109-66-0	Experimental	28 days	BOD	87 %BOD/ThOD	OECD 301F - Manometric
		Biodegradation	'			respirometry
pentane	109-66-0	Experimental		Photolytic half-life	8.07 days (t 1/2)	
Î		Photolysis		(in air)	``` ′	
isopentane	78-78-4	Experimental	28 days	BOD	71.43 %BOD/ThO	
•		Biodegradation	1		D	
isopentane	78-78-4	Experimental		Photolytic half-life	8.11 days (t 1/2)	
•		Photolysis		(in air)		

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
acetone	67-64-1	Experimental BCF - Other		Bioaccumulation factor	0.65	
acetone	67-64-1	Experimental Bioconcentration		Log Kow	-0.24	
butane	106-97-8	Experimental Bioconcentration		Log Kow	2.89	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Analogous Compound BCF - Fish	28 days	Bioaccumulation factor	540	OECD305-Bioconcentration
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Analogous Compound Bioconcentration		Log Kow	4.66	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Estimated Bioconcentration		Log Kow	3.6	
propane	74-98-6	Experimental Bioconcentration		Log Kow	2.36	
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	931-254-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbons, C6, isoalkanes, < 5% n- hexane	931-254-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbons, C6,	931-254-9	Analogous	28 days	Bioaccumulation	540	OECD305-Bioconcentration

isoalkanes, < 5% n- hexane		Compound BCF - Fish		factor		
Hydrocarbons, C6, isoalkanes, < 5% n-hexane		Analogous Compound Bioconcentration		Log Kow	4.66	
Hydrocarbons, C6, isoalkanes, < 5% n-hexane		Estimated Bioconcentration		Log Kow	3.6	
isobutane	75-28-5	Experimental Bioconcentration		Log Kow	2.76	
Non-volatiles	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Non Volatile Component	Trade Secret	Experimental Bioconcentration		Log Kow	7.41	
pentane	109-66-0	Estimated Bioconcentration		Bioaccumulation factor	26	
isopentane	78-78-4	Experimental Bioconcentration		Log Kow	2.3	

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
acetone	67-64-1	Modeled Mobility in Soil	Koc	9.7 l/kg	Episuite TM
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Modeled Mobility in Soil	Koc	≥202 l/kg	Episuite TM
Hydrocarbons, C6, isoalkanes, < 5% n-hexane		Modeled Mobility in Soil	Koc	≥202 l/kg	Episuite TM
pentane	109-66-0	Estimated Mobility in Soil	Koc	72 l/kg	Episuite TM

12.5. Results of the PBT and vPvB assessment

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

12.6. Other adverse effects

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

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. 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

EU waste code (product container after use)

15 01 04 Metallic packaging

SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	UN1950	UN1950	UN1950
14.2 UN proper shipping name	AEROSOLS	AEROSOLS, FLAMMABLE	AEROSOLS
14.3 Transport hazard class(es)	2.1	2.1	2.1
14.4 Packing group	Not applicable.	Not applicable.	Not applicable.
14.5 Environmental hazards	Not Environmentally Hazardous	Not applicable	Not a Marine Pollutant
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Classification Code	5F	Not applicable.	Not applicable.
IMDG Segregation Code	Not applicable.	Not applicable.	NONE

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

SECTION 15: Regulatory information

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

Regulation UK regulation 2023/63 (marketing and use of explosive precursors and poisons)

This product contains a reportable substance according to UK legislation 1972/66: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. Please see UK Regulation 2023/63 for further details.

Global inventory status

Contact 3M for more information.

COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1

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

Seveso named dangerous substances, Annex 1, Part 2

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

Regulation (EU) No 649/2012, as amended for GB

No chemicals listed

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended for GB.

SECTION 16: Other information

List of relevant H statements

Repeated exposure may cause skin dryness or cracking.
Extremely flammable gas.
Extremely flammable aerosol.
Extremely flammable liquid and vapour.
Highly flammable liquid and vapour.
Pressurised container: may burst if heated.
Contains gas under pressure; may explode if heated.
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Very toxic to aquatic life.
Toxic to aquatic life with long lasting effects.
Harmful to aquatic life with long lasting effects.
May cause long lasting harmful effects to aquatic life.

Revision information:

Section 8: Respiratory protection - recommended respirators information information was modified.

Section 9: Flammability (solid, gas) information information was deleted.

Section 09: Flammability information information was added. Section 09: Particle Characteristics N/A information was added.

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For Northern Ireland documents, please contact your 3M representative to obtain a copy.