

# **Safety Data Sheet**

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

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

#### 1.1. Product identifier

3M SprayMount Adhesive.

**Product identification numbers** 

GT-5000-6935-3 YP-2080-6050-6 YP-2080-6054-8 YP-2080-6204-9

# 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 substance or mixture

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

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

# Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive Indication of danger

Extremely flammable; F+; R12

Irritant; Xi; R36

R66

R67

Dangerous for the environment; N; R51/53

For full text of R phrases, see Section 16.

#### 2.2. Label elements

### Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

#### Symbol(s)





Flammable



Dangerous for the environment

#### **Contains:**

No ingredients are assigned to the label.

#### Risk phrases

R12 Extremely flammable. R36 Irritating to eyes.

Repeated exposure may cause skin dryness or cracking. R66

Vapours may cause drowsiness and dizziness. R67

R51/53 Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

#### Safety phrases

S16 Keep away from sources of ignition - No Smoking.

S23C Do not breathe vapour or spray. Use only in well ventilated areas. S51

S24 Avoid contact with skin. S29 Do not empty into drains.

S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

S2 Keep out of the reach of children.

### Special provisions concerning the labelling of certain substances

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material.

#### Notes on labelling

R65 is not required on the label because the product is an aerosol.

"Heptane and Isomers" has a generic classification of F, Xn, N; R65-38-67-R50/53. "Hexane and Isomers" has a generic classification of F, Xn, N; R65-38-67-R51/53.

#### 2.3. Other hazards

None known.

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

Ingredient	CAS Nbr	<b>EU Inventory</b>	% by Wt	Classification
Acetone	67-64-1	EINECS 200-	25 - 40	F:R11; Xi:R36; R66; R67 (EU)
		662-2		
				Flam. Liq. 2, H225; Eye Irrit. 2,
				H319; STOT SE 3, H336;
				EUH066 (CLP)
Butane	106-97-8	EINECS 203-	10 - 20	F+:R12 - Nota C (EU)

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		448-7		
		110"/		Flam. Gas 1, H220; Liquified gas, H280 - Nota C,U (CLP)
Propane	74-98-6	EINECS 200- 827-9	10 - 20	F+:R12 (EU)
				Flam. Gas 1, H220; Liquified gas, H280 - Nota U (CLP)
Non-volatiles	Trade Secret	:	7 - 13	3,
Heptane & isomers	None		5 - 10	
Hexane, mixture of isomers	None		5 - 10	
Isobutane	75-28-5	EINECS 200- 857-2	5 - 10	F+:R12 - Nota C (EU)
				Flam. Gas 1, H220; Liquified gas, H280 - Nota C,U (CLP)
Methylcyclohexane	108-87-2	EINECS 203- 624-3	1 - 5	F:R11; Xn:R65; Xi:R38; N:R51/53; R67 - Nota 4 (EU)
				Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Chronic 2, H411 (CLP)
Pentane	109-66-0	EINECS 203- 692-4	1 - 5	F+:R12; Xn:R65; N:R51/53; R66; R67 - Nota 4,C (EU)
				Flam. Liq. 2, H225; Asp. Tox. 1, H304; STOT SE 3, H336; EUH066; Aquatic Chronic 2, H411 - Nota C (CLP)
2-methyl butane	78-78-4	EINECS 201- 142-8	0.5 - 2.0	F+:R12; Xn:R65; N:R51/53; R66; R67 - Nota 4,C (EU)
				Flam. Liq. 1, H224; Asp. Tox. 1, H304; STOT SE 3, H336; EUH066; Aquatic Chronic 2, H411 (CLP)
Cyclopentane	287-92-3	EINECS 206- 016-6	0.5 - 1.5	F:R11; R52/53 (EU)
				Flam. Liq. 2, H225 (CLP) Aquatic Chronic 3, H412 (Self Classified)
n-hexane	110-54-3	EINECS 203- 777-6	0.1 - 1.0	Repr.Cat.3:R62; F:R11; Xn:R48/20; Xn:R65; Xi:R38; N:R51/53; R67 - Nota 4 (EU)
				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 (CLP)

Please see section 16 for the full text of any R phrases and H statements referred to in this section
Please refer to section 15 for the any applicable Notas that have been applied to the above components

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**

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#### 4.1. Description of first aid measures

#### Eve contact

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

#### Skin contact

Wash with soap and water. If signs/symptoms develop, get medical attention.

#### Inhalation

Remove person to fresh air. 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**

SubstanceConditionAldehydes.During combustion.Hydrocarbons.During combustion.Carbon monoxide.During combustion.Carbon dioxide.During combustion.

#### 5.3. Advice for fire-fighters

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

# **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. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

#### 6.2. Environmental precautions

Avoid release to the environment.

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

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is

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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 toxic, corrosivity or flammability 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. Collect the resulting residue containing solution. 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 or areas with little or no air movement. 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. Pressurized container: 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 release to the environment. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (eg. gloves, respirators...) as required. Vapours may travel long distances along the ground or floor to an ignition source and flash back.

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

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

Ingredient Butane	CAS Nbr 106-97-8	Agency Health and Safety Comm. (UK)	Limit type TWA:1450 mg/m³(600 ppm);STEL:1810 mg/m³(750 ppm)	Additional comments
Pentane	109-66-0	Health and Safety Comm. (UK)	TWA:1800 mg/m³(600 ppm)	
n-hexane	110-54-3	Health and Safety Comm. (UK)	TWA:72 mg/m3(20 ppm)	
Acetone	67-64-1	Health and Safety Comm. (UK)	TWA:1210 mg/m³(500 ppm);STEL:3620 mg/m³(1500 ppm)	
Propane	74-98-6	Health and Safety Comm. (UK)	Limit value not established:	asphyxiant
2-methyl butane	78-78-4	Health and Safety Comm.	TWA:1800 mg/m³(600 ppm)	

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(UK)

Health and Safety Comm. (UK): UK Health and Safety Commission

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit ppm: parts per million

mg/m³: milligrams per cubic metre

CEIL: Ceiling

#### 8.2. Exposure controls

#### 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

Wear eye/face protection.

The following eye protection(s) are recommended: Indirect vented goggles.

#### Skin/hand protection

Wear protective gloves.

Gloves made from the following material(s) are recommended: Butyl rubber.

Polymer laminate

#### 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

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

# **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical stateLiquid.Specific Physical Form:Aerosol

Appearance/Odour Transparent- white liquid in Aerosol; Strong ketone odour

pH Not applicable.

Boiling point/boiling range Not applicable.

Melting point Not applicable.

Flammability (solid, gas) Not applicable.

Explosive properties Not classified

Oxidising properties Not classified

Flash point -46 °C

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

**Relative density** 0.706 [Ref Std:WATER=1]

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Water solubilityNegligiblePartition coefficient: n-octanol/waterNo data available.Evaporation rateNo data available.Vapour density>=1 [Ref Std: AIR=1]

Viscosity Not applicable.

Density 0.706 g/ml

9.2. Other information

Percent volatile 88.5 % 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

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

None known.

# **SECTION 11: Toxicological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

#### 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:

#### Eye contact

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

#### Skin contact

Prolonged or repeated exposure may cause:

Dermal Defatting: Signs/symptoms may include localised redness, itching, drying and cracking of skin.

#### Inhalation

Intentional concentration and inhalation may be harmful or 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.

#### Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause target organ effects after ingestion.

#### **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**

**Acute Toxicity** 

Name	Route	Species	Value
Overall product	Ingestion		No test data available; calculated ATE
			>5,000 mg/kg
Acetone	Dermal	Rabbit	LD50 > 15,688 mg/kg
Acetone	Inhalation-Vapor (4	Rat	LC50 76 mg/l
	hours)		
Acetone	Ingestion	Rat	LD50 5,800 mg/kg
Propane	Inhalation-Gas (4	Rat	LC50 > 200,000 ppm
	hours)		
Butane	Inhalation-Gas (4	Rat	LC50 277,000 ppm
	hours)		
Isobutane	Inhalation-Gas (4	Rat	LC50 276,000 ppm
	hours)		
Pentane	Dermal	Rabbit	LD50 3,000 mg/kg
Pentane	Inhalation-Vapor (4	Rat	LC50 > 18  mg/l
	hours)		
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
2-methyl butane	Dermal	Rabbit	LD50 3,000 mg/kg
2-methyl butane	Inhalation-Vapor (4	Rat	LC50 > 18  mg/l
	hours)		
2-methyl butane	Ingestion	Rat	LD50 > 2,000 mg/kg
Methylcyclohexane	Inhalation-Vapor (4	Mouse	LC50 26 mg/l
	hours)		
Methylcyclohexane	Dermal	Rabbit	LD50 > 86,700  mg/kg
Methylcyclohexane	Ingestion	Rat	LD50 > 3,200  mg/kg
Cyclopentane			No data available
n-hexane	Dermal	Rabbit	LD50 > 2,000  mg/kg
n-hexane	Inhalation-Vapor (4	Rat	LC50 170 mg/l
	hours)		
n-hexane	Ingestion	Rat	LD50 28,700 mg/kg

ATE = acute toxicity estimate

# Skin Corrosion/Irritation

Name	Species	Value
Acetone		Minimal irritation
Propane		Minimal irritation
Butane		No significant irritation
Isobutane		No significant irritation
Pentane		Minimal irritation
Non-volatiles		No significant irritation
2-methyl butane		Minimal irritation
Methylcyclohexane		Minimal irritation
Cyclopentane		No data available
n-hexane		Mild irritant

**Serious Eye Damage/Irritation** 

Name	Species	Value
Acetone		Severe irritant
Propane		Mild irritant
Butane		No significant irritation
Isobutane		No significant irritation
Pentane		Mild irritant
Non-volatiles		No data available
2-methyl butane		Mild irritant
Methylcyclohexane		Mild irritant
Cyclopentane		No data available
n-hexane		Mild irritant

# **Skin Sensitisation**

Name	Species	Value
Acetone		No data available
Propane		No data available
Butane		No data available
Isobutane		No data available
Pentane		Not sensitizing
Non-volatiles		Not sensitizing
2-methyl butane		Not sensitizing
Methylcyclohexane		No data available
Cyclopentane		No data available
n-hexane		Not sensitizing

**Respiratory Sensitisation** 

Name	Species	Value
Acetone		No data available
Propane		No data available
Butane		No data available
Isobutane		No data available
Pentane		No data available
Non-volatiles		No data available
2-methyl butane		No data available
Methylcyclohexane		No data available
Cyclopentane		No data available
n-hexane		No data available

**Germ Cell Mutagenicity** 

Name	Route	Value
Acetone	In vivo	Some positive data exist, but the data are not
		sufficient for classification
Propane	In Vitro	Not mutagenic

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Butane	In Vitro	Not mutagenic
Isobutane	In Vitro	Not mutagenic
Pentane	Inhalation	Not mutagenic
Pentane	In Vitro	Some positive data exist, but the data are not sufficient for classification
Non-volatiles		No data available
2-methyl butane	Inhalation	Not mutagenic
2-methyl butane	In Vitro	Some positive data exist, but the data are not sufficient for classification
Methylcyclohexane		No data available
Cyclopentane		No data available
n-hexane	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Acetone	Not specified.		Not carcinogenic
Propane			No data available
Butane			No data available
Isobutane			No data available
Pentane			No data available
Non-volatiles			No data available
2-methyl butane			No data available
Methylcyclohexane	Inhalation		Not carcinogenic
Cyclopentane			No data available
n-hexane	Dermal		Not carcinogenic
n-hexane	Inhalation		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	<b>Exposure Duration</b>
Acetone	Ingestion	Some positive reproductive/develop mental data exist, but the data are not sufficient for classification		NOEL 1,700 mg/kg/day	
Acetone	Inhalation	Some positive reproductive/develop mental data exist, but the data are not sufficient for classification		NOEL 5.2 mg/l	
Propane		No data available			
Butane		No data available			
Isobutane		No data available			
Pentane	Ingestion	Not toxic to reproduction and/or development		NOAEL 1,000 mg/kg/day	
Pentane	Inhalation	Not toxic to reproduction and/or development		NOAEL 30 mg/l	
Non-volatiles	T /:	No data available		NOAFI	
2-methyl butane	Ingestion	Not toxic to reproduction and/or development		NOAEL 1,000 mg/kg/day	
2-methyl butane	Inhalation	Not toxic to reproduction and/or		NOAEL 30 mg/l	

		development		
Methylcyclohexane		No data available		
Cyclopentane		No data available		
n-hexane	Ingestion	Toxic to reproduction	NOAEL	
		and/or development	1,140	
			mg/kg/day	
n-hexane	Inhalation	Toxic to reproduction	LOAEL 3.52	
		and/or development	mg/l	

# Lactation

Name	Route	Species	Value
n-hexane	Inhalation		Some positive data exist, but the data
			are not sufficient for classification

# 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		LOAEL 0.6 mg/l	
Acetone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		Irritation Positive	
Acetone	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification		LOEL 24 mg/l	
Acetone	Inhalation	hematoppoitic system   immune system	Some positive data exist, but the data are not sufficient for classification		NOEL 0.6 mg/l	
Acetone	Ingestion	central nervous system depression	May cause drowsiness or dizziness		NOAEL N/A	
Propane	Inhalation	cardiac sensitization	Causes damage to organs		LOAEL 100,000 ppm	
Propane	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL N/A	
Propane	Inhalation	respiratory irritation	All data are negative		Irritation Negative	
Butane	Inhalation	cardiac sensitization	Causes damage to organs		NOAEL N/A	
Butane	Inhalation	central nervous system depression	May cause drowsiness or dizziness		LOAEL 10,000 ppm	
Butane	Inhalation	heart	Some positive data exist, but the data are not sufficient for classification		LOEL 5,000 ppm	
Butane	Inhalation	respiratory irritation	All data are negative		Irritation Negative	

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Isobutane	Inhalation	cardiac sensitization	Causes damage to organs	NOAEL N/A
Isobutane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	NOAEL N/A
Isobutane	Inhalation	respiratory irritation	All data are negative	Irritation Negative
Pentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	NOAEL N/A
Pentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Irritation Positive
Pentane	Inhalation	cardiac sensitization	Some positive data exist, but the data are not sufficient for classification	LOEL 295 mg/l
Non-volatiles			No data available	
2-methyl butane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	NOAEL N/A
2-methyl butane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Irritation N/A
2-methyl butane	Inhalation	cardiac sensitization	Some positive data exist, but the data are not sufficient for classification	LOEL 295 mg/l
Methylcycloh exane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	NOAEL N/A
Methylcycloh exane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Irritation Positive
Cyclopentane			No data available	
n-hexane	Dermal	central nervous system depression	Some positive data exist, but the data are not sufficient for classification	LOAEL 1,350 mg/kg
n-hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	NOAEL N/A
n-hexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Irritation Positive
n-hexane	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	LOEL 24.6 mg/l

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**Specific Target Organ Toxicity - repeated exposure** 

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Acetone	Dermal	eyes	Some positive data exist, but the data are not sufficient for classification		NOEL N/A	
Acetone	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		LOAEL 119 mg/l	
Acetone	Inhalation	hematopoietic system   immune system	Some positive data exist, but the data are not sufficient for classification		NOEL 0.6 mg/l	
Acetone	Inhalation	liver	All data are negative		NOAEL 45 mg/l	
Acetone	Inhalation	heart	All data are negative		NOAEL 19,000 ppm	
Acetone	Ingestion	respiratory system	Some positive data exist, but the data are not sufficient for classification		NOEL N/A	
Acetone	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		NOEL 900 mg/kg/day	
Acetone	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification		LOEL 2,500 mg/kg/day	
Acetone	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification		NOEL 200 mg/kg/day	
Acetone	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification		NOEL 1,579 mg/kg/day	
Acetone	Ingestion	muscles	All data are negative		NOAEL 2,500 mg/kg	
Acetone	Ingestion	skin   eyes	All data are negative		NOAEL 11,298 mg/kg/day	
Acetone	Ingestion	bone, teeth, nails, and/or hair	All data are negative		NOAEL 11,298 mg/kg	
Propane			No data available			
Butane	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		LOEL 1,017 ppm	

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Butane	Inhalation	blood	All data are	NOAEL 4,489
T 1 .	7.1.1.1	1:1 1/	negative	ppm
Isobutane	Inhalation	kidney and/or bladder	Some positive data exist, but the	NOAEL N/A
		bladdel	data are not	
			sufficient for	
			classification	
Pentane	Inhalation	peripheral	Some positive	NOAEL N/A
		nervous system	data exist, but the data are not	
			sufficient for	
			classification	
Pentane	Inhalation	heart   skin	All data are	NOAEL 20 mg/l
		endocrine	negative	
		system   bone,		
		teeth, nails, and/or hair		
		hematopoietic		
		system   liver		
		immune system		
		muscles		
		nervous system   eyes   kidney		
		and/or bladder		
		respiratory		
		system		
Pentane	Ingestion	kidney and/or	Some positive	LOEL 250
		bladder	data exist, but the data are not	mg/kg/day
			sufficient for	
			classification	
Non-volatiles			No data available	
2-methyl	Inhalation	peripheral	Some positive	NOAEL N/A
butane		nervous system	data exist, but the data are not	
			sufficient for	
			classification	
2-methyl	Inhalation	heart   skin	All data are	NOAEL 20 mg/l
butane		endocrine	negative	
		system   bone, teeth, nails,		
		and/or hair		
		hematopoietic		
		system   liver		
		immune system		
		muscles   nervous system		
		eyes   kidney		
		and/or bladder		
		respiratory		
2	To an exist	system	Company siti	1.071.250
2-methyl butane	Ingestion	kidney and/or bladder	Some positive data exist, but the	LOEL 250 mg/kg/day
Jumile		oladuci	data are not	mg/kg/uay
			sufficient for	
			classification	
Methylcycloh	Inhalation	liver	Some positive	NOAEL 1,200
exane			data exist, but the data are not	ppm
			sufficient for	
			classification	
Methylcycloh	Inhalation	kidney and/or	Some positive	LOEL 1.6 mg/l

avana	1	bladder	data exist, but the	
exane		biaddei	data exist, but the	
			sufficient for	
			classification	
Cyclopentane			No data available	
n-hexane	Inhalation	peripheral	Causes damage to	NOAEL N/A
II-IICXAIIC	Illiaiation	nervous system	organs through	NOAEL N/A
		neivous system	prolonged or	
			repeated exposure	
n-hexane	Inhalation	respiratory	Some positive	LOAEL 1.76
II-IIEXAIIE	Illiaiation		data exist, but the	mg/l
		system	data are not	mg/1
			sufficient for	
			classification	
n-hexane	Inhalation	avac	Some positive	NOAEL N/A
II-IIEXAIIE	Illiaiation	eyes	data exist, but the	NOAEL N/A
			data are not	
			sufficient for	
			classification	
1	Inhalatian	1		LOEL 25.2
n-hexane	Inhalation	hematopoietic	Some positive data exist, but the	LOEL 35.2 mg/l
		system	data exist, but the	
			sufficient for	
			classification	
	Inhalation	1-: 4 4/		LOEL 176
n-hexane	Innaiation	kidney and/or	Some positive data exist, but the	LOEL 1.76 mg/l
		bladder	data exist, but the	
			sufficient for	
1	T. 1 1 . 41		classification	LOFI 1 A /I
n-hexane	Inhalation	nervous system	Some positive	LOEL 1.4 mg/l
			data exist, but the	
			data are not	
			sufficient for	
1	T 1 1 /:	1.	classification	10451044
n-hexane	Inhalation	liver	Some positive	LOAEL 0.44
			data exist, but the	mg/l
			data are not	
			sufficient for	
1	T. 1 1 . 41		classification	LOFI 0.42/l
n-hexane	Inhalation	immune system	Some positive	LOEL 0.43 mg/l
			data exist, but the	
			data are not	
			sufficient for	
	T 1 1 .:	111	classification	I O I FI O O
n-hexane	Inhalation	auditory system	Some positive	LOAEL 0.2
			data exist, but the	mg/l
			data are not	
			sufficient for	
	Tub al - 41 -	The most 1 of 5 of	classification	NOAFL 176
n-hexane	Inhalation	heart   skin	All data are	NOAEL 1.76
		endocrine	negative	mg/l
	In a set i : ::	system	Cama maniti	NOAEL 1 140
n-hexane	Ingestion	peripheral	Some positive	NOAEL 1,140
		nervous system	data exist, but the	mg/kg/day
			data are not	
			sufficient for	
	Turnetini	linear Union	classification	NOCT 40
n-hexane	Ingestion	liver   immune	Some positive	NOEL 40
		system   kidney	data exist, but the	mg/kg/day
		and/or bladder	data are not sufficient for	
		i i	cutticient for	1

			classification		
n-hexane	Ingestion	endocrine	Some positive	NOEL 1,000	
		system	data exist, but the	mg/kg/day	
		hematopoietic	data are not		
		system	sufficient for		
			classification		

**Aspiration Hazard** 

Name	Value
Acetone	Not an aspiration hazard
Propane	Not an aspiration hazard
Butane	Not an aspiration hazard
Isobutane	Not an aspiration hazard
Pentane	Aspiration hazard
Non-volatiles	Not an aspiration hazard
2-methyl butane	Aspiration hazard
Methylcyclohexane	Aspiration hazard
Cyclopentane	Not an 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 be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

#### 12.1. Toxicity

### Acute aquatic hazard:

GHS Acute 3: Harmful to aquatic life.

#### **Chronic aquatic hazard:**

GHS Chronic 3: Harmful to aquatic life with long lasting effects.

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Acetone	67-64-1	Water flea	Experimental	48 hours	EC50	13,500 mg/l
Acetone	67-64-1	Rainbow trout	Experimental	96 hours	LC50	5,540 mg/l
Acetone	67-64-1	Green Algae	Experimental	96 hours	EC50	2,574 mg/l
Butane	106-97-8		No data available.			
Cyclopentane	287-92-3	Water flea	Experimental	48 hours	EC50	10.5 mg/l
Cyclopentane	287-92-3	Coho Salmon	Experimental	96 hours	LC50	>100 mg/l
n-hexane	110-54-3	Water flea	Experimental	48 hours	EC50	>3.9 mg/l
n-hexane	110-54-3	Fathead minnow	Experimental	96 hours	LC50	2.5 mg/l
Isobutane	75-28-5		No data available.			% weight
2-methyl butane	78-78-4		No data available.			

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Methylcyclohe	108-87-2	Green algae	Laboratory	72 hours	EC50	0.34 mg/l
xane						
Methylcyclohe	108-87-2	Water flea	Laboratory	48 hours	EC50	0.33 mg/l
xane						
Methylcyclohe	108-87-2	Ricefish	Laboratory	96 hours	LC50	2.1 mg/l
xane						
Pentane	109-66-0	Water flea	Experimental	48 hours	EC50	9.74 mg/l
Pentane	109-66-0	Rainbow trout	Experimental	96 hours	LC50	4.26 mg/l
Propane	74-98-6		No data			
			available.			

# 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Acetone	67-64-1	Estimated		Photolytic half-	80 days (t 1/2)	Other methods
		Photolysis		life (in air)		
Acetone	67-64-1	Experimental		Photolytic half-	146.5 days (t	Other methods
		Photolysis		life (in air)	1/2)	
Acetone	67-64-1	Experimental	28 days	BOD	96 % weight	OECD 301C - MITI
		Biodegradation				test (I)
Butane	106-97-8	Experimental		Photolytic half-	6.3 days (t 1/2)	Other methods
		Photolysis		life (in air)		
Cyclopentane	287-92-3	Experimental		Photolytic half-	6.22 days (t	Other methods
		Photolysis		life (in air)	1/2)	
n-hexane	110-54-3	Experimental			5.4 days (t 1/2)	Other methods
		Photolysis		life (in air)		
n-hexane	110-54-3	Experimental	28 days	BOD	100 % weight	OECD 301C - MITI
		Bioconcentrati				test (I)
		on				
Isobutane	75-28-5	Experimental		Photolytic half-	13.7 days (t	Other methods
		Photolysis		life (in air)	1/2)	
Isobutane	75-28-5	No data	N/A	N/A	N/A	N/A
		available.				
2-methyl	78-78-4	Experimental		Photolytic half-		Other methods
butane		Photolysis		life (in air)	1/2)	
2-methyl	78-78-4	Experimental	20 days	Percent	100 % weight	Other methods
butane		Biodegradation		degraded		
Methylcyclohe	108-87-2	Laboratory		Photolytic half-	3 days (t 1/2)	Other methods
xane		Photolysis		life (in air)		
Methylcyclohe	108-87-2	Laboratory	28 days	BOD	0 % weight	OECD 301D - Closed
xane		Biodegradation				bottle test
Pentane	109-66-0	Experimental		Photolytic half-	8.14 days (t	Other methods
		Photolysis		life (in air)	1/2)	
Pentane	109-66-0	Experimental	28 days	BOD	96 % weight	OECD 301C - MITI
		Biodegradation				test (I)
Propane	74-98-6	Experimental		Photolytic half-		Other methods
		Photolysis		life (in air)	1/2)	

# 12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type Dura	ion Study Type	Test result	Protocol
Acetone	67-64-1	Experimental	Bioaccumulati	0.65	Other methods
		BCF - Other	on factor		
Acetone	67-64-1	Experimental	Log Kow	-0.24	Other methods

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		Bioconcentrati on				
Butane	106-97-8	Experimental Bioconcentrati on		Log Kow	2.88	Other methods
Cyclopentane	287-92-3	Experimental Bioconcentrati on		Log Kow	3.00	Other methods
n-hexane	110-54-3	Modeled Bioconcentrati on		Bioaccumulati on factor	138	Other methods
Isobutane	75-28-5	Experimental Bioconcentrati on		Bioaccumulati on factor	1.97	Other methods
Isobutane	75-28-5	Experimental Bioconcentrati on		Log Kow	2.76	Other methods
2-methyl butane	78-78-4	Modeled BCF - Other			65	Estimated: Bioconcentration factor
2-methyl butane	78-78-4	Experimental Bioaccumulati on		Log Kow	2.30	Other methods
Methylcyclohe xane	108-87-2	Laboratory BCF - Other	56 days	Bioaccumulati on factor	321	OECD 305E - Bioaccumulation flow- through fish test
Pentane	109-66-0	Experimental Bioaccumulati on		Log Kow	3.39	Other methods
Propane	74-98-6	No data available.	N/A	N/A	N/A	N/A

#### 12.4. Mobility in soil

Please contact manufacturer for more details

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

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

### 12.6. Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

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

Dispose of waste product in a permitted industrial waste facility. Facility must be capable of handling aerosol cans. 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**

GT-5000-6935-3, YP-2080-6050-6, YP-2080-6054-8

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

IMDG-CODE: UN1950, AEROSOLS, 2.1, LIMITED QUANTITY, EMS: FD,SU.

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

YP-2080-6204-9

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

IMDG-CODE: UN1950, AEROSOLS, 2.1, LIMITED QUANTITY, EMS: FD,SU.

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

# **SECTION 15: Regulatory information**

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

### Global inventory status

Contact 3M for more information.

#### 15.2. Chemical Safety Assessment

Not applicable

EIHIOGG

# **SECTION 16: Other information**

#### List of relevant H statements

EUH066	Repeated exposure may cause skin dryness or cracking.
H220	Extremely flammable gas.
H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
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.

#### List of relevant R-phrases

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R11	Highly flammable.
R12	Extremely flammable.
R36	Irritating to eyes.
R38	Irritating to skin.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R51/53 Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

R52/53 Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

R62 Possible risk of impaired fertility.

R65 Harmful: May cause lung damage if swallowed.
R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

#### **Revision information:**

**Revision Changes:** 

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

Risk phrase was modified. Safety phrase was modified.

Section 8: Respiratory protection - recommended respirators was modified.

Section 1: Product identification numbers was modified.

Section 16: List of relevant R phrase information was modified.

Section 3: Composition/ Information of ingredients table was modified.

Section 2: Indication of danger information was modified.

Section 13: EU waste code (product as sold) information was modified.

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

Copyright was modified.

Section 8: Occupational exposure limit table was modified.

Aspiration Hazard Table was modified.

Section 11: Acute Toxicity table was modified.

Carcinogenicity Table was modified.

Serious Eye Damage/Irritation Table was modified.

Germ Cell Mutagenicity Table was modified.

Skin Sensitisation Table was modified.

Respiratory Sensitisation Table was modified.

Lactation Table was modified.

Reproductive Toxicity Table was modified.

Skin Corrosion/Irritation Table was modified.

Target Organs - Repeated Table was modified.

Target Organs - Single Table was modified.

Section 5: Fire - Extinguishing media information was modified.

Section 6: Accidental release clean-up information was modified.

Section 7: Precautions safe handling information was modified.

Section 7: Conditions safe storage was modified.

Section 13: Standard Phrase Category Waste GHS was modified.

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

Section 8: Respiratory protection - recommended respirators guide was added.

Section 12: Component ecotoxicity information was added.

Section 12: Persistence and Degradability information was added.

Section 13: EU waste code (product container after use) heading was added.

Section 13: EU waste code (product container after use) information was added.

Section 12:Bioccumulative potential information was added.

Section 12: Component Ecotoxicity table Material column header was added.

Section 12: Component Ecotoxicity table CAS No column header was added.

Section 12: Component Ecotoxicity table Organism column header was added.

Section 12: Component Ecotoxicity table Type column header was added.

Section 12: Component Ecotoxicity table Exposure column header was added.

Section 12: Component Ecotoxicity table End point column header was added.

Section 12: Component Ecotoxicity table Result column header was added.

Section 12: Persistence and degradability table Material column header was added.

Section 12: Persistence and degradability table CAS No column header was added.

Section 12: Persistence and degradability table Test Type column header was added.

Section 12: Persistence and degradability table Duration column header was added.

Section 12: Persistence and degradability table Test Result column header was added.

Section 12: Persistence and degradability table Protocol column header was added.

Section 12:Bioccumulative potential table Material column header was added.

Section 12:Bioccumulative potential table CAS No column header was added.

Section 12:Bioccumulative potential table CAS No column header was added.

Section 12:Bioccumulative potential table Test Result column header was added.

Section 12:Bioccumulative potential table Protocol column header was added.

Section 12:Bioccumulative potential table Test Type column header was added.

Section 12: Persistence and degradability table Study Type column header was added.

Section 12:Bioccumulative potential table Test Type column header was added.

Label: Graphic Text was added.

Label: Graphic Text was added.

Section 2: R phrase reference was added.

Label: Graphic was added.

Label: Graphic was added.

Label: Graphic Text was added.

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

Section 2: Symbol was deleted.

Section 2: Symbols heading was deleted.

Prints No Data if Component ecotoxicity information is not present was deleted.

Prints No Data if Persistence and Degradability information is not present was deleted.

Prints No Data if Bioccumulative potential information is not present was deleted.

Section 11: UN GHS Classification table heading was deleted.

Section 11: Lactation table - UN GHS Classification heading was deleted.

Section 8: Personal Protection - Respiratory Information was deleted.

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.

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