

# 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 Spray 74 Foam Adhesive

#### **Product Identification Numbers**

YP-2080-6108-2

7000116772

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

# **Identified uses**

Aerosol Adhesive.

# 1.3. Details of the supplier of the safety data sheet

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

**Telephone:** +44 (0)1344 858 000 E Mail: tox.uk@mmm.com Website: www.3M.com/uk

### 1.4. Emergency telephone number

+44 (0)1344 858 000

# **SECTION 2: Hazard identification**

#### 2.1. Classification of the substance or mixture CLP REGULATION (EC) No 1272/2008

#### **CLASSIFICATION:**

Aerosol, Category 1 - Aerosol 1; H222, H229

Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318

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

Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

#### 2.2. Label elements

### CLP REGULATION (EC) No 1272/2008

#### SIGNAL WORD

DANGER

#### **Symbols:**

GHS02 (Flame) |GHS05 (Corrosion) | GHS07 (Exclamation mark) |GHS09 (Environment) |





#### **Ingredients:**

Ingredient	CAS Nbr	EC No.	% by Wt
Acetone	67-64-1	200-662-2	10 - 20
Pentane	109-66-0	203-692-4	5 - 10

#### **HAZARD STATEMENTS:**

H222 Extremely flammable aerosol.

H229 Pressurised container. may burst if heated.

H318 Causes serious eye damage.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

#### PRECAUTIONARY STATEMENTS

**Prevention:** 

P210A Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

P251 Do not pierce or burn, even after use.

**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.

P310 Immediately call a POISON CENTRE or doctor/physician.

Storage:

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

Disposal:

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

regulations.

#### SUPPLEMENTAL INFORMATION:

#### **Supplemental Hazard Statements:**

EUH066 Repeated exposure may cause skin dryness or cracking.

67% of the mixture consists of components of unknown acute oral toxicity.

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

# Notes on labelling

H304 is not required on the label because the product is an aerosol.

Test data for a similar material indicate that this material meets the requirements for Eye Irritation Category 1 and does not meet the requirements for Eye Irritation Category 2A. No single ingredient can be attributed to the Eye Irritation Category 1 classification and thus no ingredients are disclosed (meets CLP requirements).

#### 2.3. Other hazards

None known.

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

Ingredient	CAS Nbr	EC No.	REACH Registration No.	% by Wt	Classification
Non-volatile components	Trade Secret			20 - 25	Substance not classified as hazardous
Dimethyl Ether	115-10-6	204-065-8	01- 2119472128- 37	15 - 25	Flam. Gas 1, H220; Liquified gas, H280 - Nota U
Acetone	67-64-1	200-662-2	01- 2119471330- 49	10 - 20	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336; EUH066
Butane	106-97-8	203-448-7	01- 2119474691- 32	7 - 13	Flam. Gas 1, H220; Liquified gas, H280 - Nota C,U
Pentane	109-66-0	203-692-4	01- 2119459286- 30	5 - 10	Flam. Liq. 2, H225; Asp. Tox. 1, H304; STOT SE 3, H336; EUH066; Aquatic Chronic 2, H411 - Nota C
Isobutane	75-28-5	200-857-2		3 - 7	Flam. Gas 1, H220; Liquified gas, H280 - Nota C,U
Methyl Acetate	79-20-9	201-185-2	01- 2119459211- 47	3 - 7	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336; EUH066
Propane	74-98-6	200-827-9	01- 2119486944- 21	3 - 7	Flam. Gas 1, H220; Liquified gas, H280 - Nota U
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics		920-901-0	01- 2119456810- 40	1 - 5	Asp. Tox. 1, H304; EUH066
2-methylbutane	78-78-4	201-142-8	01- 2119475602- 38	1 - 5	Flam. Liq. 1, H224; Asp. Tox. 1, H304; STOT SE 3, H336; EUH066; Aquatic Chronic 2, H411
Cyclohexane	110-82-7	203-806-2	01- 2119463273- 41	1 - 5	Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Acute 1, H400,M=1; Aquatic Chronic 1,

H410,M=1

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

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

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

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

#### Inhalation

Remove person to fresh air. Get medical attention.

#### Skin contact

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

#### Eve contact

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately 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.

D 4 6 00

Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

# 6.2. Environmental precautions

Avoid release to the environment.

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

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

Vapours may travel long distances along the ground or floor to an ignition source and flash back. For industrial/occupational use only. Not for consumer sale or use. Do not use in a confined area with minimal air exchange. 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.)

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

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 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

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	<b>Additional comments</b>
Butane	106-97-8	UK HSC	TWA:1450 mg/m³(600 ppm);STEL:1810 mg/m³(750 ppm)	
Pentane Cyclohexane	109-66-0 110-82-7	UK HSC UK HSC	TWA:1800 mg/m <sup>3</sup> (600 ppm) TWA:350 mg/m <sup>3</sup> (100	
			ppm);STEL:1050 mg/m <sup>3</sup> (300	

			ppm)	
Dimethyl Ether	115-10-6	UK HSC	TWA:766 mg/m <sup>3</sup> (400	
			ppm);STEL:958 mg/m <sup>3</sup> (500	
			ppm)	
Acetone	67-64-1	UK HSC	TWA:1210 mg/m <sup>3</sup> (500	
			ppm);STEL:3620 mg/m <sup>3</sup> (1500	
			ppm)	
Propane	74-98-6	UK HSC	Limit value not established:	asphyxiant
2-methylbutane	78-78-4	UK HSC	TWA:1800 mg/m <sup>3</sup> (600 ppm)	
Methyl Acetate	79-20-9	UK HSC	TWA:616 mg/m <sup>3</sup> (200	
•			ppm);STEL:770 mg/m <sup>3</sup> (250	
			ppm)	
LIK HSC : LIK Health and Safety Commis	cion		11 /	

UK HSC : UK Health and Safety Commission TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

# **Biological limit values**

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

Derived no effect level (DNEL)

Ingredient	Degradation Product	Population	Human exposure pattern	DNEL
Cyclohexane		Worker	Dermal, Long-term exposure (8 hours), Systemic effects	2,016 mg/kg bw/d
Cyclohexane		Worker	Inhalation, Long-term exposure (8 hours), Local effects	700 mg/m³
Cyclohexane		Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	700 mg/m <sup>3</sup>
Cyclohexane		Worker	Inhalation, Short-term exposure, Local effects	700 mg/m <sup>3</sup>
Cyclohexane		Worker	Inhalation, Short-term exposure, Systemic effects	700 mg/m <sup>3</sup>
Acetone		Worker	Dermal, Long-term exposure (8 hours), Systemic effects	186 mg/kg bw/d
Acetone		Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	1,210 mg/m³
Acetone		Worker	Inhalation, Short-term exposure, Local effects	2,420 mg/m <sup>3</sup>

Predicted no effect concentrations (PNEC)

Ingredient	Degradation	Compartment	PNEC
	Product		
Cyclohexane		Freshwater	0.207 mg/l
Cyclohexane		Freshwater sediments	3.627 mg/kg d.w.
Cyclohexane		Intermittent releases to water	0.207 mg/l
Cyclohexane		Marine water	0.207 mg/l
Acetone		Agricultural soil	29.5 mg/kg d.w.
Acetone		Freshwater	10.6 mg/l
Acetone		Freshwater sediments	30.4 mg/kg d.w.

Acetone	Intermittent releases to water	21 mg/l
Acetone	Marine water	1.06 mg/l
Acetone	Marine water sediments	3.04 mg/kg d.w.
Acetone	Sewage Treatment Plant	100 mg/l

**Recommended monitoring procedures:** Information on recommended monitoring procedures can be obtained from UK **HSC** 

#### 8.2. Exposure controls

In addition, refer to the annex for more information.

#### 8.2.1. Engineering controls

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

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

#### Eye/face protection

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

Full face shield.

Indirect vented goggles.

Applicable Norms/Standards

Use eye/face 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.

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

**Breakthrough Time** Material Thickness (mm) Nitrile rubber. 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

Half facepiece or full facepiece supplied-air respirator

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

Applicable Norms/Standards

Use a respirator conforming to EN 140 or EN 136

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

#### 8.2.3. Environmental exposure controls

Refer to Annex

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

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

Appearance

Physical state Liquid. Colour Orange

Specific Physical Form:AerosolOdorSweet OdorOdour thresholdNo data available.PHNot applicable.

Boiling point/boiling rangeNo data available.Melting pointNot applicable.Flammability (solid, gas)Not applicable.Explosive propertiesNot classifiedOxidising propertiesNot classified

Flash point -42 °C [Test Method: Tagliabue closed cup]

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

**Relative density** 0.713 [*Ref Std*:WATER=1]

Water solubility Nil

Solubility- non-waterNo data available.Partition coefficient: n-octanol/waterNo data available.Evaporation rateNo data available.Vapour densityNo data available.Decomposition temperatureNo data available.ViscosityNot applicable.Density0.713 g/ml

9.2. Other information

EU Volatile Organic Compounds 55 % [Details: Calculated using EU Definition]

Percent volatile 78.54 % 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

Heat.

Sparks and/or flames.

#### 10.5 Incompatible materials

Strong acids.

#### 10.6 Hazardous decomposition products

Substance
None known.

**Condition** 

Refer to section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

### 11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

#### Inhalation

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

#### Skin contact

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

#### Eye contact

Corrosive (eye burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

#### Ingestion

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

### **Additional Health Effects:**

## Single exposure may cause target organ effects:

Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Single exposure, above recommended guidelines, may cause:

Cardiac sensitisation: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

#### **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
--------------------------

Decay O of 20

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-	Rat	LC50 76 mg/l
	Vapour (4		
	hours)		
Acetone	Ingestion	Rat	LD50 5,800 mg/kg
Dimethyl Ether	Inhalation-	Rat	LC50 164,000 ppm
	Gas (4		
	hours)		
Butane	Inhalation-	Rat	LC50 277,000 ppm
	Gas (4		
	hours)		
Pentane	Dermal	Rabbit	LD50 3,000 mg/kg
Pentane	Inhalation-	Rat	LC50 > 18 mg/l
	Vapour (4		
	hours)		
Pentane	Ingestion	Rat	LD50 > 2,000 mg/kg
Isobutane	Inhalation-	Rat	LC50 276,000 ppm
	Gas (4		
	hours)		
Propane	Inhalation-	Rat	LC50 > 200,000 ppm
	Gas (4		
	hours)	ļ	
Methyl Acetate	Dermal	Rat	LD50 > 2,000 mg/kg
Methyl Acetate	Inhalation-	Rat	LC50 > 49 mg/l
	Vapour (4		
	hours)	<u> </u>	<u> </u>
Methyl Acetate	Ingestion	Rat	LD50 > 5,000 mg/kg
2-methylbutane	Dermal	Rabbit	LD50 3,000 mg/kg
2-methylbutane	Inhalation-	Rat	LC50 > 18 mg/l
	Vapour (4		
	hours)	<u> </u>	<u> </u>
2-methylbutane	Ingestion	Rat	LD50 > 2,000 mg/kg
Cyclohexane	Dermal	Rat	LD50 > 2,000 mg/kg
Cyclohexane	Inhalation-	Rat	LC50 > 32.9 mg/l
	Vapour (4		
0.11	hours)	   D /	LD50 (200 #
Cyclohexane	Ingestion	Rat	LD50 6,200 mg/kg
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Inhalation-		LC50 estimated to be 20 - 50 mg/l
	Vapour	1	
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Dermal	Rabbit	LD50 > 5,000 mg/kg
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

# Skin Corrosion/Irritation

Name	Species	Value
Overall product		Mild irritant
Acetone	Mouse	Minimal irritation
Butane	Professio	No significant irritation
	nal	
	judgemen	
	t	
Pentane	Rabbit	Minimal irritation
Isobutane	Professio	No significant irritation
	nal	
	judgemen	
	t	
Propane	Rabbit	Minimal irritation
Methyl Acetate	Rabbit	No significant irritation
2-methylbutane	Rabbit	Minimal irritation

Cyclohexane	Rabbit	Mild irritant
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Rabbit	Minimal irritation

**Serious Eye Damage/Irritation** 

Name	Species	Value
Overall product		Corrosive
Acetone	Rabbit	Severe irritant
Butane	Rabbit	No significant irritation
Pentane	Rabbit	Mild irritant
Isobutane	Professio	No significant irritation
	nal	
	judgemen	
	t	
Propane	Rabbit	Mild irritant
Methyl Acetate	Rabbit	Moderate irritant
2-methylbutane	Rabbit	Mild irritant
Cyclohexane	Rabbit	Mild irritant
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Rabbit	Mild irritant

# **Skin Sensitisation**

Name	Species	Value
Pentane	Guinea	Not classified
Methyl Acetate	pıg Human	Not classified
2-methylbutane	Guinea pig	Not classified
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Guinea pig	Not classified

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

**Germ Cell Mutagenicity** 

Name	Route	Value	
Acetone	In vivo	Not mutagenic	
Acetone	In Vitro	Some positive data exist, but the data are not sufficient for classification	
Dimethyl Ether	In Vitro	Not mutagenic	
Dimethyl Ether	In vivo	Not mutagenic	
Butane	In Vitro	Not mutagenic	
Pentane	In vivo	Not mutagenic	
Pentane	In Vitro	Some positive data exist, but the data are not sufficient for classification	
Isobutane	In Vitro	Not mutagenic	
Propane	In Vitro	Not mutagenic	
Methyl Acetate	In Vitro	Not mutagenic	
Methyl Acetate	In vivo	Not mutagenic	
2-methylbutane	In vivo	Not mutagenic	
2-methylbutane	In Vitro	Some positive data exist, but the data are not sufficient for classification	
Cyclohexane	In Vitro	Not mutagenic	
Cyclohexane	In vivo	Some positive data exist, but the data are not sufficient for classification	
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	In Vitro	Not mutagenic	
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	In vivo	Not mutagenic	

Carcinogenicity

Caremogenety							
Name	Route	Species	Value				
Acetone	Not	Multiple	Not carcinogenic				
	specified	animal					

		species	
Dimethyl Ether	Inhalation	Rat	Not carcinogenic
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Not	Not	Not carcinogenic
	specified.	available	-

# Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration	
Acetone	etone Ingestion Not classified for male reproduction		Rat	NOAEL 1,700 mg/kg/day	13 weeks	
Acetone	Inhalation	Not classified for development	Rat	NOAEL 5.2 mg/l	during organogenesis	
Dimethyl Ether	Inhalation	Not classified for development	Rat	NOAEL 40,000 ppm	during organogenesis	
Pentane	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during organogenesis	
Pentane	Inhalation	Not classified for development	Rat	NOAEL 30 mg/l	during organogenesis	
2-methylbutane	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during organogenesis	
2-methylbutane	Inhalation	Not classified for development	Rat	NOAEL 30 mg/l	during organogenesis	
Cyclohexane	Inhalation	Not classified for female reproduction	Rat	NOAEL 24 mg/l	2 generation	
Cyclohexane	Inhalation	Not classified for male reproduction	Rat	NOAEL 24 mg/l	2 generation	
Cyclohexane	Inhalation	Not classified for development	Rat	NOAEL 6.9 mg/l	2 generation	
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Not specified.	Not classified for female reproduction	Not available	NOAEL NA	1 generation	
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Not specified.	Not classified for male reproduction	Not available	NOAEL NA	28 days	
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Not specified.	Not classified for development	Not available	NOAEL NA	during gestation	

# 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
Dimethyl Ether	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Rat	LOAEL 10,000 ppm	30 minutes
Dimethyl Ether	Inhalation	cardiac sensitisation	Some positive data exist, but the Dog NOAEL		NOAEL 100,000 ppm	5 minutes
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	NOAEL Not available	

				animal		
Butane	Inhalation	heart	Not classified	Dog	NOAEL 5,000 ppm	25 minutes
Butane	Inhalation	respiratory irritation	Not classified	Rabbit	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
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	
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	
Methyl Acetate	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Methyl Acetate	Inhalation	respiratory irritation	May cause respiratory irritation	Human and animal	NOAEL Not available	
Methyl Acetate	Inhalation	blindness	Not classified		NOAEL Not available	
Methyl Acetate	Ingestion	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
2-methylbutane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
2-methylbutane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL Not available	not available
2-methylbutane	Inhalation	cardiac sensitisation	Not classified	Dog	NOAEL Not available	not available
2-methylbutane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	not available
Cyclohexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Cyclohexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
Cyclohexane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure
						Duration

D 12 C 2

Acetone	Dermal	eyes	Not classified	Guinea	NOAEL Not available	3 weeks
Acetone	Inhalation	hematopoietic system	Not classified	Human	NOAEL 3 mg/l	6 weeks
Acetone	Inhalation	immune system	Not classified	Human	NOAEL 1.19 mg/l	6 days
Acetone	Inhalation	kidney and/or bladder	Not classified	Guinea pig	NOAEL 119 mg/l	not available
Acetone	Inhalation	heart   liver	Not classified	Rat	NOAEL 45 mg/l	8 weeks
Acetone	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 900 mg/kg/day	13 weeks
Acetone	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 200 mg/kg/day	13 weeks
Acetone	Ingestion	liver	Not classified	Mouse	NOAEL 3,896 mg/kg/day	14 days
Acetone	Ingestion	eyes	Not classified	Rat	NOAEL 3,400 mg/kg/day	13 weeks
Acetone	Ingestion	respiratory system	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	muscles	Not classified	Rat	NOAEL 2,500 mg/kg	13 weeks
Acetone	Ingestion	skin   bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 11,298 mg/kg/day	13 weeks
Dimethyl Ether	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 25,000 ppm	2 years
Dimethyl Ether	Inhalation	liver	Not classified	Rat	NOAEL 20,000 ppm	30 weeks
Butane	Inhalation	kidney and/or bladder   blood	Not classified	Rat	NOAEL 4,489 ppm	90 days
Pentane	Inhalation	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
Pentane	Inhalation	heart   skin   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system	Not classified	Rat	NOAEL 20 mg/l	13 weeks
Pentane	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 2,000 mg/kg/day	28 days
Isobutane	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 4,500 ppm	13 weeks
Methyl Acetate	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	28 days
Methyl Acetate	Inhalation	endocrine system   hematopoietic system   liver   immune system   kidney and/or bladder	Not classified	Rat	NOAEL 6.1 mg/l	28 days
2-methylbutane	Inhalation	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure

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2-methylbutane	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
2-methylbutane	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 2,000 mg/kg/day	28 days
Cyclohexane	Inhalation	liver	Not classified	Rat	NOAEL 24 mg/l	90 days
Cyclohexane	Inhalation	auditory system	Not classified	Rat	NOAEL 1.7 mg/l	90 days
Cyclohexane	Inhalation	kidney and/or bladder	Not classified	Rabbit	NOAEL 2.7 mg/l	10 weeks
Cyclohexane	Inhalation	hematopoietic system	Not classified	Mouse	NOAEL 24 mg/l	14 weeks
Cyclohexane	Inhalation	peripheral nervous system	Not classified	Rat	NOAEL 8.6 mg/l	30 weeks

**Aspiration Hazard** 

Name	Value
Pentane	Aspiration hazard
2-methylbutane	Aspiration hazard
Cyclohexane	Aspiration hazard
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Aspiration hazard

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

# **SECTION 12: Ecological information**

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

# 12.1. Toxicity

No product test data available.

Material	CAS#	Organism	Type	Exposure	Test endpoint	Test result
Dimethyl Ether	115-10-6	Guppy	Experimental	96 hours	LC50	>4,100 mg/l
Dimethyl Ether	115-10-6	Water flea	Experimental	48 hours	EC50	>4,400 mg/l
Acetone	67-64-1	Algae other	Experimental	96 hours	EC50	11,493 mg/l
Acetone	67-64-1	Crustacea other	Experimental	24 hours	LC50	2,100 mg/l
Acetone	67-64-1	Rainbow trout	Experimental	96 hours	LC50	5,540 mg/l
Acetone	67-64-1	Water flea	Experimental	21 days	NOEC	1,000 mg/l
Butane	106-97-8		Data not available or insufficient for			

			classification			
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
Isobutane	75-28-5		Data not available or insufficient for classification			
Methyl Acetate	79-20-9	Green algae	Experimental	72 hours	EC50	>120 mg/l
Methyl Acetate	79-20-9	Water flea	Experimental	48 hours	EC50	1,026.7 mg/l
Methyl Acetate	79-20-9	Green algae	Experimental	72 hours	NOEC	120 mg/l
Propane	74-98-6		Data not available or insufficient for classification			
Cyclohexane	110-82-7	Fathead minnow	Experimental	96 hours	LC50	4.53 mg/l
Cyclohexane	110-82-7	Water flea	Experimental	48 hours	EC50	0.9 mg/l
Hydrocarbons, C11- C13, isoalkanes, <2% aromatics	920-901-0	Green Algae	Estimated	72 hours	Effect Level 50%	>1,000 mg/l
Hydrocarbons, C11- C13, isoalkanes, <2% aromatics	920-901-0	Rainbow trout	Estimated	96 hours	Lethal Level 50%	>1,000 mg/l
Hydrocarbons, C11- C13, isoalkanes, <2% aromatics	920-901-0	Water flea	Estimated	48 hours	Effect Level 50%	>1,000 mg/l
Hydrocarbons, C11- C13, isoalkanes, <2% aromatics	920-901-0	Green Algae	Estimated	72 hours	No obs Effect Level	1,000 mg/l
Hydrocarbons, C11- C13, isoalkanes, <2%	920-901-0	Water flea	Experimental	21 days	No obs Effect Level	1 mg/l
2-methylbutane	78-78-4		Data not available or insufficient for classification			

# 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Dimethyl Ether	115-10-6	Experimental Photolysis		Photolytic half-life (in air)	12.4 days (t 1/2)	Other methods
Dimethyl Ether	115-10-6	Experimental Biodegradation	28 days	BOD	5 % weight	OECD 301D - Closed bottle test
Acetone	67-64-1	Experimental Photolysis		Photolytic half-life (in air)	147 days (t 1/2)	Other methods
Acetone	67-64-1	Experimental Biodegradation	28 days	BOD	78 % weight	OECD 301D - Closed bottle test
Butane	106-97-8	Experimental Photolysis		Photolytic half-life (in air)	12.3 days (t 1/2)	Other methods
Pentane	109-66-0	Experimental Photolysis		Photolytic half-life (in air)	8.07 days (t 1/2)	Other methods
Pentane	109-66-0	Experimental Biodegradation	28 days	BOD	87 % BOD/ThBOD	OECD 301F - Manometric respirometry
Isobutane	75-28-5	Experimental Photolysis		Photolytic half-life (in air)	13.4 days (t 1/2)	Other methods
Methyl Acetate	79-20-9	Experimental Biodegradation	28 days	BOD	70 % weight	OECD 301D - Closed bottle test

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Propane	74-98-6	Experimental		Photolytic half-life	27.5 days (t	Other methods
_		Photolysis		(in air)	1/2)	
Cyclohexane	110-82-7	Experimental		Photolytic half-life	4.14 days (t	Other methods
		Photolysis		(in air)	1/2)	
Cyclohexane	110-82-7	Experimental	28 days	BOD	77 %	OECD 301F - Manometric
		Biodegradation			BOD/ThBOD	respirometry
Hydrocarbons, C11-C13,	920-901-0	Estimated	28 days	BOD	31.3 %	OECD 301F - Manometric
isoalkanes, <2% aromatics		Biodegradation			BOD/ThBOD	respirometry
2-methylbutane	78-78-4	Experimental		Photolytic half-life	8.11 days (t	Other methods
-		Photolysis		(in air)	1/2)	
2-methylbutane	78-78-4	Experimental	28 days	BOD	71.43 %	Other methods
		Biodegradation	,		BOD/ThBOD	

### 12.3: Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Dimethyl Ether	115-10-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Acetone	67-64-1	Experimental Bioconcentration		Log Kow	-0.24	Other methods
Butane	106-97-8	Experimental Bioconcentration		Log Kow	2.89	Other methods
Pentane	109-66-0	Estimated Bioconcentration		Bioaccumulation factor	26	Estimated: Bioconcentration factor
Isobutane	75-28-5	Experimental Bioconcentration		Log Kow	2.76	Other methods
Methyl Acetate	79-20-9	Experimental Bioconcentration		Log Kow	0.18	Other methods
Propane	74-98-6	Experimental Bioconcentration		Log Kow	2.36	Other methods
Cyclohexane	110-82-7	Experimental BCF- Carp	56 days	Bioaccumulation factor	129	OECD 305E - Bioaccumulation flow- through fish test
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	920-901-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2-methylbutane	78-78-4	Experimental Bioconcentration		Log Kow	2.3	Other methods

# 12.4. Mobility in soil

Please contact manufacturer for more details

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

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

### 12.6. Other adverse effects

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

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

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

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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**

YP-2080-6108-2

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

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

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

# **SECTION 15: Regulatory information**

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

#### Restrictions on the manufacture, placing on the market and use:

The following substance(s) contained in this product is/are subject through Annex XVII of REACH regulation to restrictions on the manufacture, placing on the market and use when present in certain dangerous substances, mixtures and articles. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

Ingredient **CAS Nbr** Cyclohexane 110-82-7

Restriction status: listed in REACH Annex XVII

Restricted uses: See Annex XVII to Regulation (EC) No 1907/2006 for Conditions of Restriction

#### 15.2. Chemical Safety Assessment

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

# **SECTION 16: Other information**

#### List of relevant H statements

EUH066 Repeated exposure may cause skin dryness or cracking.

H220 Extremely flammable gas. H222 Extremely flammable aerosol. H224 Extremely flammable liquid and vapour.

Highly flammable liquid and vapour. H225 Pressurised container. may burst if heated. H229

Contains gas under pressure; may explode if heated. H280

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

#### **Revision information:**

Industrial Application of Adhesives: Section 16: Annex information was deleted.

Industrial Use of Adhesives and Sealants: Section 16: Annex information was modified.

Industrial Use of Adhesives: Section 16: Annex information was added.

Professional Use of Adhesives and Sealants: Section 16: Annex information was modified.

Section 1: Product identification numbers information was modified.

Section 01: SAP Material Numbers information was modified.

CLP: Ingredient table information was modified.

CLP Remark(phrase) information was added.

Label: CLP Percent Unknown information was modified.

Label: CLP Precautionary - Response information was modified.

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

Section 7: Conditions safe storage information was modified.

Section 7: Precautions safe handling information information was modified.

Section 09: Color information was added.

Section 09: Odor information was added.

Sections 3 and 9: Odour, colour, grade information information was deleted.

Section 9: Vapour pressure value information was added.

Section 11: Acute Toxicity table information was modified.

Section 11: Aspiration Hazard Table information was modified.

Section 11: Carcinogenicity Table information was modified.

Section 11: Germ Cell Mutagenicity Table information was modified.

Section 11: Reproductive and/or Developmental Effects text information was deleted.

Section 11: Reproductive Toxicity Table information was modified.

Section 11: Serious Eye Damage/Irritation Table information was modified.

Section 11: Skin Corrosion/Irritation Table information was modified.

Section 11: Skin Sensitization Table information was modified.

Section 11: Target Organs - Repeated Table information was modified.

Section 11: Target Organs - Single Table information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12:Bioccumulative potential information information was modified.

Section 13: 13.1. Waste disposal note information was modified.

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

Section 15: Regulations - Inventories information was deleted.

Section 15: Restrictions on manufacture ingredients information information was added.

# Annex

1. Title	
Substance identification	Cyclohexane; EC No. 203-806-2; CAS Nbr 110-82-7;
Exposure Scenario Name	Industrial Use of Adhesives
Lifecycle Stage	Use at industrial sites

Contributing activities	PROC 07 -Industrial spraying PROC 08a -Transfer of substance or mixture (charging and discharging) at non- dedicated facilities PROC 08b -Transfer of substance or mixture (charging and discharging) at
	dedicated facilities
	PROC 09 -Transfer of substance or mixture into small containers (dedicated
	filling line, including weighing)
	PROC 10 -Roller application or brushing
	PROC 13 -Treatment of articles by dipping and pouring
	ERC 04 -Use of non-reactive processing aid at industrial site (no inclusion into or
Due access tools and activities account	onto article)  Application of product through a mixing nozzle Application of product with a
Processes, tasks and activities covered	roller or brush. Application of product with a policator gun. Spraying of substances/mixtures. Transfers with dedicated controls, including loading, filling,
	dumping, bagging. Transfers without dedicated controls, including loading, filling,
	dumping, bagging.
2. Operational conditions and risk mana	
<b>Operating Conditions</b>	Physical state:Liquid.
	General operating conditions:
	Assumes use at not more than 20°C above ambient temperature; Duration of use: 8 hours/day;
	Emission days per year: <= 100 days per year;
	Task: PROC07;
	Indoors with good general ventilation;
Risk management measures	Under the operational conditions described above the following risk management
	measures apply:
	General risk management measures: Human health:
	None needed;
	Environmental:
	None needed;
	;
	The following task-specific risk management measures apply in addition to those
	listed above:
	Task: PROC08a; Human Health;
	Provide extract ventilation to points where emissions occur;
	-
	Task: PROC08b; Human Health;
	Provide extract ventilation to points where emissions occur;
	,
	Task: PROC10;
	Human Health;
Wasta managament maggunag	Provide extract ventilation to points where emissions occur;
Waste management measures	Do not apply industrial sludge to natural soils;
3. Prediction of exposure	1
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and
_	PNECs when the identified risk management measures are adopted.
[	
1. Title	
Substance identification	Acetone;
	EC No. 200-662-2; CAS Nbr 67-64-1;
	CAND 1301 U/-UT-1,
Exposure Scenario Name	Industrial Use of Adhesives and Sealants
Lifecycle Stage	Use at industrial sites
Contributing activities	PROC 07 -Industrial spraying
	1

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	ERC 04 -Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
Processes, tasks and activities covered	Spraying of substances/mixtures.
2. Operational conditions and risk mana	ngement measures
Operating Conditions	Physical state:Liquid.
	General operating conditions:
	Duration of use: 8 hours/day;
	Emission days per year: <= 360 days per year;
Risk management measures	Under the operational conditions described above the following risk management measures apply:
	General risk management measures:
	Human health:
	Goggles - Chemical resistant;
	Provide a good standard of general ventilation (not less than 3 to 5 air changes per
	hour);
	Wear chemically resistant gloves (tested to EN374) in combination with 'basic'
	employee training. Refer to Section 8 of the SDS for specific glove material.;
	Environmental:
	None needed;
	The following task-specific risk management measures apply in addition to those listed above:
	Task: PROC07;
	Human Health;
	Local exhaust ventilation;
Waste management measures	No use-specific waste management measures are required for this product. Refer
	to Section 13 of main SDS for disposal instructions:
3. Prediction of exposure	The section of the se
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and
1 realeron of exposure	PNECs when the identified risk management measures are adopted.
	1 11.205 when the identified risk management measures are adopted.

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1. Title	
Substance identification	Acetone;
	EC No. 200-662-2;
	CAS Nbr 67-64-1;
Exposure Scenario Name	Professional Use of Adhesives and Sealants
Lifecycle Stage	Widespread use by professional workers
Contributing activities	PROC 11 -Non industrial spraying
_	ERC 08d -Widespread use of non-reactive processing aid (no inclusion into or
	onto article, outdoor)
Processes, tasks and activities covered	Spraying of substances/mixtures.
2. Operational conditions and risk mana	gement measures
Operating Conditions	Physical state:Liquid.
	General operating conditions:
	Duration of use: 8 hours/day;
	Emission days per year: <= 360 days per year;
Risk management measures	Under the operational conditions described above the following risk management
_	measures apply:
	General risk management measures:
	Human health:
	Goggles - Chemical resistant;
	Provide a good standard of general ventilation (not less than 3 to 5 air changes per
	hour);
	Wear chemically resistant gloves (tested to EN374) in combination with 'basic'
	employee training. Refer to Section 8 of the SDS for specific glove material.;
	Environmental:
	None needed;
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	; The following task-specific risk management measures apply in addition to those listed above: Task: PROC11; Human Health; Local exhaust ventilation;
Waste management measures	No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions:
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

1. Title	
Substance identification	Cyclohexane;
	EC No. 203-806-2;
	CAS Nbr 110-82-7;
Exposure Scenario Name	Professional Use of Adhesives and Sealants
Lifecycle Stage	Widespread use by professional workers
Contributing activities	PROC 10 -Roller application or brushing
	PROC 11 -Non industrial spraying
	PROC 13 -Treatment of articles by dipping and pouring
	ERC 08a -Widespread use of non-reactive processing aid (no inclusion into or
	onto article, indoor)
	ERC 08d -Widespread use of non-reactive processing aid (no inclusion into or
Due access toolies and activities accessed	onto article, outdoor)  Application of product with a roller or brush. Application of product with
Processes, tasks and activities covered	application of product with a roller of brush. Application of product with applicator gun. Spraying of substances/mixtures.
2. Operational conditions and risk mana	
Operating Conditions	Physical state:Liquid.
operating conditions	General operating conditions:
	Assumes use at not more than 20°C above ambient temperature;
	Duration of use: 8 hours/day;
	Indoor use;
	Outdoor use;
	Tools, PDOC10.
	Task: PROC10; Indoors with good general ventilation;
	indoors with good general ventuation,
	Task: Indoor spraying;
	Handle substance within a predominantly closed system provided with extract
	ventilation;
Risk management measures	Under the operational conditions described above the following risk management
	measures apply:
	General risk management measures:
	Human health:
	None needed; Environmental:
	None needed;
	:
	The following task-specific risk management measures apply in addition to those
	listed above:
	Task: PROC10;
	Human Health;
	Air-purifying Half-Mask (with gas/vapour-cartridge, that can be combined with a particulate filter) (APF 10);
	Task: PROC11;
	Human Health;  Air purifying Holf Mock (with coc/yangur certridge, that can be combined with a
	Air-purifying Half-Mask (with gas/vapour-cartridge, that can be combined with a particulate filter) (APF 10);
	particulate filter) (AFF 10),

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Waste management measures	Task: PROC13; Human Health; Provide extract ventilation to points where emissions occur; Send to a municipal sewage treatment plant;
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

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