



## Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the Notification of Ministry of Industry, System of Hazardous Classification and Communication B.E.2555.

### SECTION 1: Identification

#### 1.1. Product identifier

3M 77 Super Spray Adhesive

**Company:** 3M Thailand Ltd.

**Address:** 12th Floor, Serm-Mitr Tower 159 Asoke Road (Sukhumvit 21) Bangkok 10110 Thailand

#### Product Identification Numbers

XS-0020-0272-2      XS-0020-0273-0

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Adhesive aerosol

#### 1.3. Supplier's details

**ADDRESS:** 3M Thailand Limited, Sukhumvit 21, Wattana, Bangkok 10110, Thailand

**Telephone:** 66(0)22608577

**E Mail:** 3MThailand@mmm.com

**Website:** <http://www.3M.com/TH>

#### 1.4. Emergency telephone number

66-2-2608577

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

Flammable Aerosol: Category 1.

Gas Under Pressure: Liquefied gas.

Skin Corrosion/Irritation: Category 2.

Specific Target Organ Toxicity (single exposure): Category 1.

Specific Target Organ Toxicity (single exposure): Category 3.

Acute Aquatic Toxicity: Category 2.

#### 2.2. Label elements

**Signal word**

Danger

**Symbols**

Flame | Gas cylinder | Exclamation mark | Health Hazard |

**Pictograms**



**Hazard Statements**

H222 Extremely flammable aerosol.  
H280 Contains gas under pressure; may explode if heated.  
  
H315 Causes skin irritation.  
H336 May cause drowsiness or dizziness.  
  
H370 Causes damage to organs:  
cardiovascular system |  
  
H401 Toxic to aquatic life.

**Precautionary statements**

**General:**

P102 Keep out of reach of children.  
P101 If medical advice is needed, have product container or label at hand.

**Prevention:**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P211 Do not spray on an open flame or other ignition source.  
P251 Do not pierce or burn, even after use.  
P260 Do not breathe dust/fume/gas/mist/vapors/spray.  
P271 Use only outdoors or in a well-ventilated area.

**Response:**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P332 + P313 If skin irritation occurs: Get medical advice/attention.  
P307 + P311 IF exposed: Call a POISON CENTER or doctor/physician.

**Storage:**

P410 + P403 Protect from sunlight. Store in a well-ventilated place.  
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.  
P405 Store locked up.

**Disposal:**

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

**2.3. Other hazards**

None known

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

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	64742-49-0	25 - 35
POLYMER	Trade Secret	10 - 30
LIQUIFIED PETROLEUM GAS	68476-86-8	15 - 25
CYCLOHEXANE	110-82-7	10 - 20
DIMETHYL ETHER	115-10-6	5 - 15
GLYCEROL ESTER	Trade Secret	5 - 15
HEXANE	110-54-3	1 - 5
PENTANE	109-66-0	1 - 5

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation:

Remove person to fresh air. Get medical attention.

#### Skin Contact:

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

#### Eye Contact:

No need for first aid is anticipated.

#### 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. Suitable 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.

### 5.3. Special protective actions for fire-fighters

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

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

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

information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

**6.2. Environmental precautions**

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

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

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Contain spill. 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. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Do not use in a confined area with minimal air exchange. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe dust/fume/gas/mist/vapors/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 oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

**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. Protect from sunlight. Store in a well-ventilated place. Store away from heat. Store away from acids. Store away from oxidizing agents.

**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	C.A.S. No.	Agency	Limit type	Additional Comments
PENTANE	109-66-0	ACGIH	TWA:1000 ppm	
HEXANE	110-54-3	ACGIH	TWA:50 ppm	SKIN
CYCLOHEXANE	110-82-7	ACGIH	TWA:100 ppm	
DIMETHYL ETHER	115-10-6	AIHA	TWA:1880 mg/m3(1000 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

Thailand OELs : Thailand. Ministry of Interior, Re: Notification Health and Safety in the Work Environment on chemical B.E.2520

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

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/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

None required.

#### 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: Fluoroelastomer  
Nitrile Rubber

#### 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 vapors

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

<b>Physical state</b>	Liquid
<b>Specific Physical Form:</b>	Aerosol
<b>Appearance/Odor</b>	Mild solvent odor; white to tan color.
<b>Odor threshold</b>	<i>No Data Available</i>
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point/Freezing point</b>	<i>Not Applicable</i>
<b>Boiling point/Initial boiling point/Boiling range</b>	<i>Not Applicable</i>
<b>Flash Point</b>	-42 °C [ <i>Details:Propellant</i> ]
<b>Evaporation rate</b>	<i>No Data Available</i>
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Flammable Limits(LEL)</b>	<i>No Data Available</i>
<b>Flammable Limits(UEL)</b>	<i>No Data Available</i>
<b>Vapor Pressure</b>	<i>No Data Available</i>
<b>Vapor Density</b>	<i>No Data Available</i>
<b>Density</b>	<i>Not Applicable</i>
<b>Relative Density</b>	<i>Not Applicable</i>
<b>Water solubility</b>	<i>Not Applicable</i>
<b>Solubility- non-water</b>	<i>No Data Available</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>Not Applicable</i>
<b>Autoignition temperature</b>	<i>Not Applicable</i>
<b>Decomposition temperature</b>	<i>No Data Available</i>
<b>Viscosity</b>	<i>No Data Available</i>
<b>Percent volatile</b>	<i>No Data Available</i>

## 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 polymerization will not occur.

**10.4. Conditions to avoid**

Heat  
Sparks and/or flames

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products**

<u>Substance</u>	<u>Condition</u>
Hydrocarbons	Not Specified
Formaldehyde	Not Specified
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified

**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 labeling, 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:

**Inhalation:**

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

**Skin Contact:**

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

**Eye Contact:**

Contact with the eyes during product use is not expected to result in significant irritation.

**Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

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.

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

**Prolonged or repeated exposure may cause target organ effects:**

Peripheral Neuropathy: Signs/symptoms may include tingling or numbness of the extremities, incoordination, weakness of the hands and feet, tremors and muscle atrophy.

**Reproductive/Developmental Toxicity:**

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

**Toxicological Data**

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

**Acute Toxicity**

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Dermal	Rabbit	LD50 > 3,160 mg/kg
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Inhalation-Vapor (4 hours)	Rat	LC50 > 14.7 mg/l
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Ingestion	Rat	LD50 > 5,000 mg/kg
LIQUIFIED PETROLEUM GAS	Inhalation-Gas (4 hours)	Rat	LC50 277,000 ppm
CYCLOHEXANE	Dermal	Rat	LD50 > 2,000 mg/kg
CYCLOHEXANE	Inhalation-Vapor (4 hours)	Rat	LC50 > 32.9 mg/l
CYCLOHEXANE	Ingestion	Rat	LD50 6,200 mg/kg
DIMETHYL ETHER	Inhalation-Gas (4 hours)	Rat	LC50 164,000 ppm
POLYMER	Dermal		LD50 estimated to be > 5,000 mg/kg
POLYMER	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
GLYCEROL ESTER	Dermal	Rat	LD50 > 2,000 mg/kg
GLYCEROL ESTER	Ingestion	Rat	LD50 > 2,000 mg/kg
PENTANE	Dermal	Rabbit	LD50 3,000 mg/kg
PENTANE	Inhalation-Vapor (4 hours)	Rat	LC50 > 18 mg/l
PENTANE	Ingestion	Rat	LD50 > 2,000 mg/kg
HEXANE	Dermal	Rabbit	LD50 > 2,000 mg/kg
HEXANE	Inhalation-Vapor (4 hours)	Rat	LC50 170 mg/l
HEXANE	Ingestion	Rat	LD50 > 28,700 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Rabbit	Irritant
LIQUIFIED PETROLEUM GAS	Professional judgement	No significant irritation

**3M 77 Super Spray Adhesive**

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CYCLOHEXANE	Rabbit	Mild irritant
POLYMER	Professional judgement	Minimal irritation
GLYCEROL ESTER	Rabbit	No significant irritation
PENTANE	Rabbit	Minimal irritation
HEXANE	Human and animal	Mild irritant

**Serious Eye Damage/Irritation**

Name	Species	Value
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Rabbit	Mild irritant
LIQUIFIED PETROLEUM GAS	Professional judgement	No significant irritation
CYCLOHEXANE	Rabbit	Mild irritant
GLYCEROL ESTER	Rabbit	Mild irritant
PENTANE	Rabbit	Mild irritant
HEXANE	Rabbit	Mild irritant

**Skin Sensitization**

Name	Species	Value
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Guinea pig	Not classified
GLYCEROL ESTER	Human and animal	Not classified
PENTANE	Guinea pig	Not classified
HEXANE	Human	Not classified

**Respiratory Sensitization**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Germ Cell Mutagenicity**

Name	Route	Value
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	In Vitro	Not mutagenic
LIQUIFIED PETROLEUM GAS	In Vitro	Not mutagenic
CYCLOHEXANE	In Vitro	Not mutagenic
CYCLOHEXANE	In vivo	Some positive data exist, but the data are not sufficient for classification
DIMETHYL ETHER	In Vitro	Not mutagenic
DIMETHYL ETHER	In vivo	Not mutagenic
PENTANE	In vivo	Not mutagenic
PENTANE	In Vitro	Some positive data exist, but the data are not sufficient for classification
HEXANE	In Vitro	Not mutagenic
HEXANE	In vivo	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
DIMETHYL ETHER	Inhalation	Rat	Not carcinogenic
HEXANE	Dermal	Mouse	Not carcinogenic
HEXANE	Inhalation	Mouse	Some positive data exist, but the data are not



sufficient for classification

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
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
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
HEXANE	Ingestion	Not classified for development	Mouse	NOAEL 2,200 mg/kg/day	during organogenesis
HEXANE	Inhalation	Not classified for development	Rat	NOAEL 0.7 mg/l	during gestation
HEXANE	Ingestion	Toxic to male reproduction	Rat	NOAEL 1,140 mg/kg/day	90 days
HEXANE	Inhalation	Toxic to male reproduction	Rat	LOAEL 3.52 mg/l	28 days

**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
LIQUIFIED PETROLEUM GAS	Inhalation	cardiac sensitization	Causes damage to organs	similar compounds	NOAEL Not available	
LIQUIFIED PETROLEUM GAS	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
LIQUIFIED PETROLEUM GAS	Inhalation	respiratory irritation	Not classified		NOAEL 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	Professional judgement	NOAEL Not available	
DIMETHYL ETHER	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Rat	LOAEL 10,000 ppm	30 minutes
DIMETHYL ETHER	Inhalation	cardiac sensitization	Some positive data exist, but the	Dog	NOAEL	5 minutes

**3M 77 Super Spray Adhesive**

			data are not sufficient for classification		100,000 ppm	
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 sensitization	Not classified	Dog	NOAEL Not available	not available
PENTANE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	not available
HEXANE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
HEXANE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL Not available	8 hours
HEXANE	Inhalation	respiratory system	Not classified	Rat	NOAEL 24.6 mg/l	8 hours

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
LIQUIFIED PETROLEUM GAS	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL Not available	
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
DIMETHYL ETHER	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 25,000 ppm	2 years
DIMETHYL ETHER	Inhalation	liver	Not classified	Rat	NOAEL 20,000 ppm	30 weeks
PENTANE	Inhalation	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
PENTANE	Inhalation	heart   skin   endocrine system   bone, teeth, nails, and/or hair   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
HEXANE	Inhalation	peripheral nervous system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
HEXANE	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Mouse	LOAEL 1.76 mg/l	13 weeks
HEXANE	Inhalation	liver	Not classified	Rat	NOAEL Not available	6 months
HEXANE	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 1.76 mg/l	6 months

**3M 77 Super Spray Adhesive**

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

**Aspiration Hazard**

Name	Value
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Aspiration hazard
CYCLOHEXANE	Aspiration hazard
PENTANE	Aspiration hazard
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 labeling, 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 2: Toxic to aquatic life.

**Chronic aquatic hazard:**

Not chronically toxic to aquatic life by GHS criteria.

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	64742-49-0		Data not available or insufficient for classification			
POLYMER	Trade Secret		Data not available or insufficient for classification			
LIQUIFIED PETROLEUM GAS	68476-86-8		Data not available or insufficient for classification			

**3M 77 Super Spray Adhesive**

CYCLOHEXANE	110-82-7	Fathead Minnow	Experimental	96 hours	Lethal Concentration 50%	4.53 mg/l
CYCLOHEXANE	110-82-7	Water flea	Experimental	48 hours	Effect Concentration 50%	0.9 mg/l
DIMETHYL ETHER	115-10-6	Water flea	Experimental	48 hours	Effect Concentration 50%	>4,400 mg/l
DIMETHYL ETHER	115-10-6	Guppy	Experimental	96 hours	Lethal Concentration 50%	>4,100 mg/l
GLYCEROL ESTER	Trade Secret	Water flea	Estimated		Effect Level 50%	>100 mg/l
GLYCEROL ESTER	Trade Secret	Fathead Minnow	Estimated		Lethal Level 50%	>100 mg/l
GLYCEROL ESTER	Trade Secret	Green algae	Estimated		Effect Level 50%	>100 mg/l
GLYCEROL ESTER	Trade Secret	Green Algae	Estimated		No obs Effect Level	>100 mg/l
HEXANE	110-54-3	Fathead Minnow	Experimental	96 hours	Lethal Concentration 50%	2.5 mg/l
HEXANE	110-54-3	Water flea	Experimental	48 hours	Lethal Concentration 50%	3.9 mg/l
PENTANE	109-66-0	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	4.26 mg/l
PENTANE	109-66-0	Water flea	Experimental	48 hours	Effect Concentration 50%	2.7 mg/l
PENTANE	109-66-0	Green Algae	Experimental	72 hours	Effect Concentration 50%	10.7 mg/l
PENTANE	109-66-0	Green Algae	Experimental	72 hours	No obs Effect Conc	2.04 mg/l

**12.2. Persistence and degradability**

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	64742-49-0	Experimental Biodegradation	28 days	Biological Oxygen Demand	89 % weight	OECD 301F - Manometric Respiro
POLYMER	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
LIQUIFIED PETROLEUM GAS	68476-86-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

**3M 77 Super Spray Adhesive**

CYCLOHEXANE	110-82-7	Experimental Biodegradation	28 days	Biological Oxygen Demand	77 % BOD/ThBOD	OECD 301F - Manometric Respiro
CYCLOHEXANE	110-82-7	Experimental Photolysis		Photolytic half-life (in air)	4.14 days (t 1/2)	Other methods
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	Biological Oxygen Demand	5 % weight	OECD 301D - Closed Bottle Test
GLYCEROL ESTER	Trade Secret	Experimental Biodegradation	28 days	Carbon dioxide evolution	47.3 % weight	OECD 301B - Mod. Sturm or CO2
HEXANE	110-54-3	Experimental Bioconcentration	28 days	Biological Oxygen Demand	100 % weight	OECD 301C - MITI (I)
HEXANE	110-54-3	Experimental Photolysis		Photolytic half-life (in air)	5.4 days (t 1/2)	Other methods
PENTANE	109-66-0	Experimental Biodegradation	28 days	Biological Oxygen Demand	87 % BOD/ThBOD	OECD 301F - Manometric Respiro
PENTANE	109-66-0	Experimental Photolysis		Photolytic half-life (in air)	8.07 days (t 1/2)	Other methods

**12.3. Bioaccumulative potential**

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	64742-49-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
POLYMER	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
LIQUIFIED PETROLEUM GAS	68476-86-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
CYCLOHEXANE	110-82-7	Experimental BCF-Carp	56 days	Bioaccumulation Factor	129	OECD 305E-Bioaccum FI-thru fis
DIMETHYL ETHER	115-10-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
GLYCEROL ESTER	Trade Secret	Estimated Bioconcentration		Bioaccumulation Factor	7.4	Est: Bioconcentration factor
HEXANE	110-54-3	Estimated Bioconcentration		Bioaccumulation Factor	50	Est: Bioconcentration factor
PENTANE	109-66-0	Estimated Bioconcentration		Bioaccumulation Factor	26	Est: Bioconcentration factor

#### 12.4. Mobility in soil

Please contact manufacturer for more details

#### 12.5 Other adverse effects

No information available

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

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

Incinerate in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

### SECTION 14: Transport Information

UN No.: UN1950

UN Proper Shipping Name: AERSOLS, POISON

Transport hazard class (IMO): 2.1 Flammable gases

Transport hazard class (IATA): 2.1 Flammable gases

Packing Group: III

Environmental Hazards:

Not applicable

Special precautions for user

Not applicable.

### 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.

### SECTION 16: Other information

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

3M Thailand SDSs are available at <http://www.3M.com/TH>