

Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the Canadian Hazardous Products Regulations.

SECTION 1: Identification

1.1. Product identifier 3M SPRAY TRIM ADHESIVE 80747

Product Identification Numbers CS-0406-7013-8 CS-0406-7057-5

1.2. Recommended use and restrictions on use

Recommended use

Adhesive

1.3. Supplier's details

Company:3M Canada CompanyDivision:Industrial Tape And Specialties DivisionAddress:1840 Oxford Street East, Post Office Box 5757, London, Ontario N6A 4T1Telephone:(800) 364-3577Website:www.3M.ca

1.4. Emergency telephone number

Medical Emergency Telephone: (519) 451-2500, Ext. 2222; Transportation Emergency Telephone (CANUTEC): (613) 996-6666

SECTION 2: Hazard identification

The following product identification number(s) are sold in the consumer market place: CS-0406-7013-8; CS-0406-7057-5

2.1. Classification of the substance or mixture

Flammable Aerosol: Category 1. Serious Eye Damage/Irritation: Category 2B. Reproductive Toxicity: Category 2. Simple Asphyxiant. Specific Target Organ Toxicity (single exposure): Category 1. Specific Target Organ Toxicity (central nervous system): Category 3. Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements Signal word Danger

Symbols Flame | Exclamation mark | Health Hazard |

Pictograms



Hazard statements

Extremely flammable aerosol. Causes eye irritation. May cause drowsiness or dizziness. Suspected of damaging fertility or the unborn child. May displace oxygen and cause rapid suffocation. Causes damage to organs: cardiovascular system

Causes damage to organs through prolonged or repeated exposure: nervous system |

Precautionary statements

General:

Keep out of reach of children. Read label before use. If medical advice is needed, have product container or label at hand.

Prevention:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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. Use only outdoors or in a well-ventilated area. Wear protective gloves. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention.

Storage:

Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal:

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

2.3. Other hazards

None known.

30% of the mixture consists of ingredients of unknown acute oral toxicity.30% of the mixture consists of ingredients of unknown acute dermal toxicity.61% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt	
NON-VOLATILE COMPONENTS	Trade Secret	20 - 30	
CYCLOHEXANE	110-82-7	10 - 20	
2-METHYLPENTANE	107-83-5	5 - 15	
DIMETHYL ETHER	115-10-6	7 - 13	
ISOBUTANE	75-28-5	7 - 13	
PROPANE	74-98-6	7 - 13	
2,3-DIMETHYLBUTANE	79-29-8	3 - 7	
3-METHYLPENTANE	96-14-0	3 - 7	
2,2-DIMETHYLBUTANE	75-83-2	1 - 5	
HEXANE	110-54-3	0.1 - 1	

NON-VOLATILE COMPONENTS is a non-hazardous Trade Secret material according to WHMIS criteria. 2-METHYLPENTANE is a hazardous Trade Secret material according to WHMIS criteria. Refer to Section 15 for further information.

CYCLOHEXANE is a hazardous Trade Secret material according to WHMIS criteria. Refer to Section 15 for further information.

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.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, 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. 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 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 designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam 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 authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as possible.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. 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. 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
2-METHYLPENTANE	107-83-5	ACGIH	TWA:500 ppm;STEL:1000	
			ppm	
HEXANE	110-54-3	ACGIH	TWA:50 ppm	Skin Notation
CYCLOHEXANE	110-82-7	ACGIH	TWA:100 ppm	
DIMETHYL ETHER	115-10-6	AIHA	TWA:1880 mg/m3(1000 ppm)	
DIMETHYL ETHER	115-10-6	CMRG	TWA:1000 ppm	
PROPANE	74-98-6	ACGIH	Limit value not established:	
ISOBUTANE	75-28-5	ACGIH	STEL:1000 ppm	

2,2-DIMETHYLBUTANE	75-83-2	ACGIH	TWA:500 ppm;STEL:1000	
			ppm	
2,3-DIMETHYLBUTANE	79-29-8	ACGIH	TWA:500 ppm;STEL:1000	
			ppm	
3-METHYLPENTANE	96-14-0	ACGIH	TWA:500 ppm;STEL:1000	
			ppm	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association CMRG : Chemical Manufacturer's Recommended Guidelines

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

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Indirect Vented Goggles

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 supplied-air respirator

Organic vapor respirators may have short service life.

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

Liquid		
Aerosol		
Light cream coloured; Sweet/fruity odour		
No Data Available		
Approximately 6.7 Units not available or not applicable		
No Data Available		
No Data Available		

Flash Point	-41.1 °C [Test Method: Tagliabue Closed Cup]
Evaporation rate	1.9 [<i>Ref Std</i> :ETHER=1]
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	Not Applicable
Flammable Limits(UEL)	No Data Available
Vapour Pressure	No Data Available
Vapuor Density	2.97 [<i>Ref Std</i> :AIR=1]
Density	No Data Available
Relative density	0.697 [<i>Ref Std</i> :WATER=1]
Water solubility	No Data Available
Solubility- non-water	No Data Available
Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	No Data Available
Decomposition temperature	No Data Available
Viscosity	Not Applicable
Volatile Organic Compounds	75 % [<i>Test Method</i> :tested per SCAQMD method 305]
Percent volatile	75 % weight
VOC Less H2O & Exempt Solvents	527 g/l [<i>Test Method</i> :tested per SCAQMD method 305]

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

10.5. Incompatible materials

Not determined

10.6. Hazardous decomposition products

Substance Carbon monoxide Carbon dioxide Toxic Vapor, Gas, Particulate **Condition** Not Specified Not Specified 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:

Intentional concentration and inhalation may be harmful or fatal. 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 localized redness, swelling, itching, and dryness.

Eye Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:

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

Additional Health Effects:

Single exposure may cause target organ effects:

Single exposure, above recommended guidelines, may cause:

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

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

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	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-		No data available; calculated ATE >50 mg/l
	Vapor(4 hr)		
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
CYCLOHEXANE	Dermal	Rat	LD50 > 2,000 mg/kg
CYCLOHEXANE	Inhalation-	Rat	LC50 > 32.9 mg/l
	Vapor (4		
	hours)		
CYCLOHEXANE	Ingestion	Rat	LD50 6,200 mg/kg
2-METHYLPENTANE	Dermal		LD50 estimated to be > 5,000 mg/kg
2-METHYLPENTANE	Inhalation-		LC50 estimated to be $> 50 \text{ mg/l}$
	Vapor		_
2-METHYLPENTANE	Ingestion		LD50 estimated to be > 5,000 mg/kg
ISOBUTANE	Inhalation-	Rat	LC50 276,000 ppm
	Gas (4		
	hours)		
DIMETHYL ETHER	Inhalation-	Rat	LC50 164,000 ppm
	Gas (4		

	hours)		
PROPANE	Inhalation-	Rat	LC50 > 200,000 ppm
	Gas (4		
	hours)		
3-METHYLPENTANE	Dermal		LD50 estimated to be > 5,000 mg/kg
3-METHYLPENTANE	Inhalation-		LC50 estimated to be $> 50 \text{ mg/l}$
	Vapor		
3-METHYLPENTANE	Ingestion		LD50 estimated to be > 5,000 mg/kg
2,3-DIMETHYLBUTANE	Dermal		LD50 estimated to be > 5,000 mg/kg
2,3-DIMETHYLBUTANE	Inhalation-		LC50 estimated to be $> 50 \text{ mg/l}$
	Vapor		
2,3-DIMETHYLBUTANE	Ingestion		LD50 estimated to be > 5,000 mg/kg
2,2-DIMETHYLBUTANE	Dermal		LD50 estimated to be > 5,000 mg/kg
2,2-DIMETHYLBUTANE	Inhalation-		LC50 estimated to be $> 50 \text{ mg/l}$
	Vapor		
2,2-DIMETHYLBUTANE	Ingestion		LD50 estimated to be > 5,000 mg/kg
HEXANE	Dermal	Rabbit	LD50 > 2,000 mg/kg
HEXANE	Inhalation-	Rat	LC50 170 mg/l
	Vapor (4		
	hours)		
HEXANE	Ingestion	Rat	LD50 > 28,700 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
CYCLOHEXANE	Rabbit	Mild irritant
2-METHYLPENTANE	Professio	Mild irritant
	nal	
	judgeme	
	nt	
ISOBUTANE	Professio	No significant irritation
	nal	
	judgeme	
	nt	
PROPANE	Rabbit	Minimal irritation
3-METHYLPENTANE	Professio	Mild irritant
	nal	
	judgeme	
	nt	
2,3-DIMETHYLBUTANE	Professio	Mild irritant
	nal	
	judgeme	
	nt	
2,2-DIMETHYLBUTANE	Professio	Mild irritant
	nal	
	judgeme	
	nt	
HEXANE	Human	Mild irritant
	and	
	animal	

Serious Eye Damage/Irritation

Name	Species	Value
CYCLOHEXANE	Rabbit	Mild irritant
2-METHYLPENTANE	Professio nal judgeme nt	Moderate irritant
ISOBUTANE	Professio nal judgeme nt	No significant irritation

PROPANE	Rabbit	Mild irritant	
3-METHYLPENTANE	Professio	Moderate irritant	
	nal		
	judgeme		
	nt		
2,3-DIMETHYLBUTANE	Professio	Moderate irritant	
	nal		
	judgeme		
	nt		
2,2-DIMETHYLBUTANE	Professio	Moderate irritant	
	nal		
	judgeme		
	nt		
HEXANE	Rabbit	Mild irritant	

Skin Sensitization

Name	Species	Value
HEXANE	Human	Not sensitizing

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
CYCLOHEXANE	In Vitro	Not mutagenic
CYCLOHEXANE	In vivo	Some positive data exist, but the data are not sufficient for classification
ISOBUTANE	In Vitro	Not mutagenic
DIMETHYL ETHER	In Vitro	Not mutagenic
DIMETHYL ETHER	In vivo	Not mutagenic
PROPANE	In Vitro	Not mutagenic
HEXANE	In Vitro	Not mutagenic
HEXANE	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
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 toxic to female reproduction	Rat	NOAEL 24 mg/l	2 generation
CYCLOHEXANE	Inhalation	Not toxic to male reproduction	Rat	NOAEL 24 mg/l	2 generation
CYCLOHEXANE	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 6.9 mg/l	2 generation
DIMETHYL ETHER	Inhalation	Not toxic to development	Rat	NOAEL 40,000 ppm	during organogenesi s
HEXANE	Ingestion	Not toxic to development	Mouse	NOAEL 2,200 mg/kg/day	during organogenesi s
HEXANE	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 0.7 mg/l	during gestation
HEXANE	Ingestion	Toxic to male reproduction	Rat	NOAEL 1,140	90 days

				mg/kg/day	
HEXANE	Inhalation	Toxic to male reproduction	Rat	LOAEL 3.52	28 days
				mg/l	

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
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	
2-METHYLPENTANE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
2-METHYLPENTANE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
2-METHYLPENTANE	Inhalation	cardiac sensitization	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL Not available	
2-METHYLPENTANE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
ISOBUTANE	Inhalation	cardiac sensitization	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	All data are negative	Mouse	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 data are not sufficient for classification	Dog	NOAEL 100,000 ppm	5 minutes
PROPANE	Inhalation	cardiac sensitization	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	All data are negative	Human	NOAEL Not available	
3-METHYLPENTANE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
3-METHYLPENTANE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
3-METHYLPENTANE	Inhalation	cardiac sensitization	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL Not available	
3-METHYLPENTANE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
2,3-DIMETHYLBUTANE	Inhalation	central nervous	May cause drowsiness or	Professio	NOAEL Not	

		system depression	dizziness	nal judgeme nt	available	
2,3-DIMETHYLBUTANE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
2,3-DIMETHYLBUTANE	Inhalation	cardiac sensitization	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL Not available	
2,3-DIMETHYLBUTANE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
2,2-DIMETHYLBUTANE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
2,2-DIMETHYLBUTANE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
2,2-DIMETHYLBUTANE	Inhalation	cardiac sensitization	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL Not available	
2,2-DIMETHYLBUTANE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL 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	Some positive data exist, but the data are not sufficient for classification	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
CYCLOHEXANE	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 24 mg/l	90 days
CYCLOHEXANE	Inhalation	auditory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.7 mg/l	90 days
CYCLOHEXANE	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL 2.7 mg/l	10 weeks
CYCLOHEXANE	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 24 mg/l	14 weeks
CYCLOHEXANE	Inhalation	peripheral nervous system	All data are negative	Rat	NOAEL 8.6 mg/l	30 weeks
2-METHYLPENTANE	Inhalation	peripheral nervous system	All data are negative	Rat	NOAEL 5.3 mg/l	14 weeks
2-METHYLPENTANE	Ingestion	peripheral nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	8 weeks
2-METHYLPENTANE	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2,000 mg/kg	28 days
ISOBUTANE	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 4,500 ppm	13 weeks
DIMETHYL ETHER	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25,000 ppm	2 years

DIMETHYL ETHER	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 20,000 ppm	30 weeks
3-METHYLPENTANE	Inhalation	peripheral nervous system	All data are negative	Rat	NOAEL 5.3 mg/l	14 weeks
3-METHYLPENTANE	Ingestion	peripheral nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	8 weeks
3-METHYLPENTANE	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2,000 mg/kg	28 days
2,3-DIMETHYLBUTANE	Inhalation	peripheral nervous system	All data are negative	Rat	NOAEL 5.3 mg/l	14 weeks
2,3-DIMETHYLBUTANE	Ingestion	peripheral nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	8 weeks
2,3-DIMETHYLBUTANE	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2,000 mg/kg	28 days
2,2-DIMETHYLBUTANE	Inhalation	peripheral nervous system	All data are negative	Rat	NOAEL 5.3 mg/l	14 weeks
2,2-DIMETHYLBUTANE	Ingestion	peripheral nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	8 weeks
2,2-DIMETHYLBUTANE	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2,000 mg/kg	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	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	6 months
HEXANE	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1.76 mg/l	6 months
HEXANE	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 35.2 mg/l	13 weeks
HEXANE	Inhalation	auditory system immune system eyes	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
HEXANE	Inhalation	heart skin endocrine system	All data are negative	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	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	13 weeks

Aspiration Hazard

Name	Value
CYCLOHEXANE	Aspiration hazard
2-METHYLPENTANE	Aspiration hazard
3-METHYLPENTANE	Aspiration hazard
2,3-DIMETHYLBUTANE	Aspiration hazard
2,2-DIMETHYLBUTANE	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

No data available.

SECTION 13: Disposal considerations

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

SECTION 14: Transport Information

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

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.

Trade Secret Information: HMIRA Registry Number: Filing date: TBD

Claim status:

Date of decision:

SECTION 16: Other information

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Health: 2 Flammability: 4 Instability: 0 Special Hazards: None Aerosol Storage Code: 3

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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