



Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3M™ Scotch-Weld™ Neoprene High Performance Rubber and Gasket Adhesive EC-1300

Product Identification Numbers

87-2500-0421-2, 87-2500-0423-8

1.2. Recommended use and restrictions on use

Recommended use

Rubber and Gasket Adhesive

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Aerospace and Commercial Transportation Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

2.1. Hazard classification

Flammable Liquid: Category 2.

Serious Eye Damage/Irritation: Category 2A.

Skin Corrosion/Irritation: Category 2.

Reproductive Toxicity: Category 1B.

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

Highly flammable liquid and vapor.

Causes serious eye irritation.

Causes skin irritation.

May cause drowsiness or dizziness.

May damage fertility or the unborn child.

Causes damage to organs through prolonged or repeated exposure:

nervous system |

sensory organs |

Precautionary Statements

Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/bond container and receiving equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment.

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wear protective gloves and eye/face protection.

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 ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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 ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

IF exposed or concerned: Get medical advice/attention.

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

Keep cool.

Store locked up.

Disposal:

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

2.3. Hazards not otherwise classified

None.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Light Solvent Naphtha	64741-84-0	15 - 30 Trade Secret *
Methyl Ethyl Ketone	78-93-3	20 - 30 Trade Secret *
Magnesium Resinate	68037-42-3	15 - 30
Polychloroprene	9010-98-4	10 - 20
n-Hexane	110-54-3	5 - 14 Trade Secret *
Toluene	108-88-3	5 - 10 Trade Secret *
Cyclohexane	110-82-7	0.1 - 2 Trade Secret *
Xylene	1330-20-7	0.1 - 1 Trade Secret *
Zinc Oxide	1314-13-2	0.1 - 1
Styrenated Phenol	61788-44-1	0.1 - 0.5 Trade Secret *

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures**4.1. Description of first aid measures****Inhalation:**

Remove person to fresh air. If you feel unwell, 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:

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

Not applicable

SECTION 5: Fire-fighting measures**5.1. Suitable extinguishing media**

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

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-ProductsSubstanceCondition

Hydrocarbons
Carbon monoxide
Carbon dioxide

During Combustion
During Combustion
During Combustion

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

Avoid release to the environment. 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

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 soon as possible.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. 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 release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (gloves, respirators, etc.) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. 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
Toluene	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human carcin
Toluene	108-88-3	CMRG	STEL:75 ppm	Skin Notation
Toluene	108-88-3	OSHA	TWA:200 ppm;CEIL:300 ppm	
n-Hexane	110-54-3	ACGIH	TWA:50 ppm	Skin Notation
n-Hexane	110-54-3	OSHA	TWA:1800 mg/m3(500 ppm)	
Cyclohexane	110-82-7	ACGIH	TWA:100 ppm	
Cyclohexane	110-82-7	OSHA	TWA:1050 mg/m3(300 ppm)	
Zinc Oxide	1314-13-2	ACGIH	TWA(respirable fraction):2 mg/m3;STEL(respirable fraction):10 mg/m3	
Zinc Oxide	1314-13-2	OSHA	TWA(as fume):5 mg/m3;TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
Xylene	1330-20-7	ACGIH	TWA:100 ppm;STEL:150 ppm	A4: Not class. as human carcin
Xylene	1330-20-7	CMRG	TWA:50 ppm;STEL:75 ppm	
Xylene	1330-20-7	OSHA	TWA:435 mg/m3(100 ppm)	
Methyl Ethyl Ketone	78-93-3	ACGIH	TWA:200 ppm;STEL:300 ppm	
Methyl Ethyl Ketone	78-93-3	OSHA	TWA:590 mg/m3(200 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

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. Use explosion-proof ventilation 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. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

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

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an

exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic 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

General Physical Form:	Liquid
Odor, Color, Grade:	Yellow, solvent odor.
Odor threshold	<i>No Data Available</i>
pH	<i>Not Applicable</i>
Melting point	<i>Not Applicable</i>
Boiling Point	>=80 °C
Flash Point	-4 °F [<i>Test Method:</i> Closed Cup] [<i>Details:</i> Petroleum Distillates]
Evaporation rate	>=2.0 [<i>Ref Std:</i> ETHER=1]
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	1.0 % volume
Flammable Limits(UEL)	10.0 % volume
Vapor Pressure	<=91 mmHg [@ 77 °F]
Vapor Density	>=2.41 [<i>Ref Std:</i> AIR=1]
Density	0.88 g/ml
Specific Gravity	0.88 [<i>Ref Std:</i> WATER=1]
Solubility in Water	Nil
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	404 °C
Decomposition temperature	<i>No Data Available</i>
Viscosity	2,200 - 3,200 centipoise [@ 73.4 °F]
Hazardous Air Pollutants	<=22.3 % weight [<i>Test Method:</i> Calculated]
Volatile Organic Compounds	<=667 g/l [<i>Test Method:</i> calculated SCAQMD rule 443.1]
Percent volatile	<=76 % [<i>Test Method:</i> Estimated]
VOC Less H2O & Exempt Solvents	<=669 g/l [<i>Test Method:</i> calculated SCAQMD rule 443.1]
Solids Content	23.6 - 43.8 %

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

Strong oxidizing agents

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

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:

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

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.

Prolonged or repeated exposure may cause target organ effects:

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

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

Olfactory Effects: Signs/symptoms may include decreased ability to detect odors and/or complete loss of smell.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

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-Vapor(4 hr)		No data available; calculated ATE > 50 mg/l
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Methyl Ethyl Ketone	Dermal	Rabbit	LD50 > 8,050 mg/kg
Methyl Ethyl Ketone	Inhalation-Vapor (4 hours)	Rat	LC50 34.5 mg/l
Methyl Ethyl Ketone	Ingestion	Rat	LD50 2,737 mg/kg
Light Solvent Naphtha	Dermal	Rabbit	LD50 > 2,000 mg/kg
Light Solvent Naphtha	Inhalation-Vapor (4 hours)	Rat	LC50 259 mg/l
Light Solvent Naphtha	Ingestion	Rat	LD50 > 5,000 mg/kg
n-Hexane	Dermal	Rabbit	LD50 > 2,000 mg/kg
n-Hexane	Inhalation-Vapor (4 hours)	Rat	LC50 170 mg/l
n-Hexane	Ingestion	Rat	LD50 > 28,700 mg/kg
Magnesium Resinate	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Polychloroprene	Dermal		LD50 estimated to be > 5,000 mg/kg
Polychloroprene	Ingestion	Rat	LD50 > 20,000 mg/kg
Toluene	Dermal	Rat	LD50 12,000 mg/kg
Toluene	Inhalation-Vapor (4 hours)	Rat	LC50 30 mg/l
Toluene	Ingestion	Rat	LD50 5,550 mg/kg
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
Xylene	Dermal	Rabbit	LD50 > 4,200 mg/kg
Xylene	Inhalation-Vapor (4 hours)	Rat	LC50 29 mg/l
Xylene	Ingestion	Rat	LD50 3,523 mg/kg
Zinc Oxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Zinc Oxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.7 mg/l
Zinc Oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Styrenated Phenol	Dermal	Rabbit	LD50 > 5,010 mg/kg
Styrenated Phenol	Ingestion	Rat	LD50 3,550 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Methyl Ethyl Ketone	Rabbit	Minimal irritation
Light Solvent Naphtha	Rabbit	Irritant
n-Hexane	Human and animal	Mild irritant
Polychloroprene	Human	No significant irritation
Toluene	Rabbit	Irritant
Cyclohexane	Rabbit	Mild irritant
Xylene	Rabbit	Mild irritant
Zinc Oxide	Human and animal	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Methyl Ethyl Ketone	Rabbit	Severe irritant
Light Solvent Naphtha	Rabbit	Mild irritant
n-Hexane	Rabbit	Mild irritant
Polychloroprene	Professional judgement	No significant irritation
Toluene	Rabbit	Moderate irritant
Cyclohexane	Rabbit	Mild irritant
Xylene	Rabbit	Mild irritant
Zinc Oxide	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
Light Solvent Naphtha	Guinea pig	Not sensitizing
n-Hexane	Human	Not sensitizing
Toluene	Guinea pig	Not sensitizing
Zinc Oxide	Guinea pig	Some positive data exist, but the data are not sufficient for classification

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
Methyl Ethyl Ketone	In Vitro	Not mutagenic
Light Solvent Naphtha	In Vitro	Not mutagenic
n-Hexane	In Vitro	Not mutagenic
n-Hexane	In vivo	Not mutagenic
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic
Cyclohexane	In Vitro	Not mutagenic
Cyclohexane	In vivo	Some positive data exist, but the data are not sufficient for classification
Xylene	In Vitro	Not mutagenic
Xylene	In vivo	Not mutagenic
Zinc Oxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
Zinc Oxide	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Methyl Ethyl Ketone	Inhalation	Human	Not carcinogenic
n-Hexane	Dermal	Mouse	Not carcinogenic
n-Hexane	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Toluene	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Toluene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Toluene	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Xylene	Dermal	Rat	Not carcinogenic
Xylene	Ingestion	Multiple animal species	Not carcinogenic
Xylene	Inhalation	Human	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
Methyl Ethyl Ketone	Inhalation	Not toxic to female reproduction	Rat	NOAEL 14.7 mg/l	90 days
Methyl Ethyl Ketone	Inhalation	Not toxic to male reproduction	Rat	NOAEL 14.7 mg/l	90 days
Methyl Ethyl Ketone	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	LOAEL 8.8 mg/l	during gestation
n-Hexane	Ingestion	Not toxic to development	Mouse	NOAEL 2,200 mg/kg/day	during organogenesis
n-Hexane	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 0.7 mg/l	during gestation
n-Hexane	Ingestion	Toxic to male reproduction	Rat	NOAEL 1,140 mg/kg/day	90 days
n-Hexane	Inhalation	Toxic to male reproduction	Rat	LOAEL 3.52 mg/l	28 days
Toluene	Inhalation	Some positive female reproductive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.3 mg/l	1 generation
Toluene	Ingestion	Toxic to development	Rat	LOAEL 520 mg/kg/day	during gestation
Toluene	Inhalation	Toxic to development	Human	NOAEL Not available	poisoning and/or abuse
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
Xylene	Ingestion	Not toxic to female reproduction	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Xylene	Ingestion	Not toxic to male reproduction	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Xylene	Inhalation	Some positive female reproductive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure

Xylene	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL Not available	during organogenesis
Xylene	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	during gestation
Zinc Oxide	Ingestion	Some positive reproductive/developmental data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 125 mg/kg/day	prematuring & during gestation

Lactation

Name	Route	Species	Value
Xylene	Ingestion	Mouse	Does not cause effects on or via lactation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Methyl Ethyl Ketone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	official classification	NOAEL Not available	
Methyl Ethyl Ketone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Methyl Ethyl Ketone	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	not applicable
Methyl Ethyl Ketone	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1,080 mg/kg	not applicable
Light Solvent Naphtha	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Light Solvent Naphtha	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
n-Hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
n-Hexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL Not available	8 hours
n-Hexane	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 24.6 mg/l	8 hours
Toluene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Toluene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Toluene	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 0.004 mg/l	3 hours
Toluene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
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	
Xylene	Inhalation	auditory system	Causes damage to organs	Rat	LOAEL 6.3 mg/l	8 hours
Xylene	Inhalation	central nervous	May cause drowsiness or	Human	NOAEL Not	

		system depression	dizziness		available	
Xylene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Xylene	Inhalation	eyes	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 3.5 mg/l	not available
Xylene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	eyes	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 250 mg/kg	not applicable

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Methyl Ethyl Ketone	Dermal	nervous system	All data are negative	Guinea pig	NOAEL Not available	31 weeks
Methyl Ethyl Ketone	Inhalation	liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 14.7 mg/l	90 days
Methyl Ethyl Ketone	Inhalation	heart endocrine system bone, teeth, nails, and/or hair hematopoietic system immune system muscles	All data are negative	Rat	NOAEL 14.7 mg/l	90 days
Methyl Ethyl Ketone	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	7 days
Methyl Ethyl Ketone	Ingestion	nervous system	All data are negative	Rat	NOAEL 173 mg/kg/day	90 days
n-Hexane	Inhalation	peripheral nervous system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
n-Hexane	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Mouse	LOAEL 1.76 mg/l	13 weeks
n-Hexane	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	6 months
n-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
n-Hexane	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 35.2 mg/l	13 weeks
n-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
n-Hexane	Inhalation	heart skin endocrine system	All data are negative	Rat	NOAEL 1.76 mg/l	6 months
n-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
n-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
Toluene	Inhalation	auditory system nervous system eyes olfactory	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse

		system				
Toluene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2.3 mg/l	15 months
Toluene	Inhalation	heart liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 11.3 mg/l	15 weeks
Toluene	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	4 weeks
Toluene	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL Not available	20 days
Toluene	Inhalation	bone, teeth, nails, and/or hair	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	8 weeks
Toluene	Inhalation	hematopoietic system vascular system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Toluene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 625 mg/kg/day	13 weeks
Toluene	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 600 mg/kg/day	14 days
Toluene	Ingestion	endocrine system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 105 mg/kg/day	28 days
Toluene	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 105 mg/kg/day	4 weeks
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
Xylene	Inhalation	nervous system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.4 mg/l	4 weeks
Xylene	Inhalation	auditory system	May cause damage to organs through prolonged or repeated exposure	Rat	LOAEL 7.8 mg/l	5 days
Xylene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
Xylene	Inhalation	heart endocrine system hematopoietic system muscles kidney and/or bladder respiratory system	All data are negative	Multiple animal species	NOAEL 3.5 mg/l	13 weeks
Xylene	Ingestion	auditory system	Some positive data exist, but the	Rat	NOAEL 900	2 weeks

			data are not sufficient for classification		mg/kg/day	
Xylene	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,500 mg/kg/day	90 days
Xylene	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	heart skin endocrine system bone, teeth, nails, and/or hair hematopoietic system immune system nervous system respiratory system	All data are negative	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Zinc Oxide	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 600 mg/kg/day	10 days
Zinc Oxide	Ingestion	endocrine system hematopoietic system kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Other	NOAEL 500 mg/kg/day	6 months

Aspiration Hazard

Name	Value
Light Solvent Naphtha	Aspiration hazard
n-Hexane	Aspiration hazard
Toluene	Aspiration hazard
Cyclohexane	Aspiration hazard
Xylene	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

Ecotoxicological information

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

Chemical fate information

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

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. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. 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.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable), D035 (Methyl ethyl ketone)

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. US Federal Regulations

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
Toluene	108-88-3	5 - 10
n-Hexane	110-54-3	5 - 14
n-Hexane (Hexane)	110-54-3	5 - 14
Cyclohexane	110-82-7	0.1 - 2

15.2. State Regulations

Contact 3M for more information.

California Proposition 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
Toluene	108-88-3	Female reproductive toxin
Toluene	108-88-3	Developmental Toxin

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 Flammability: 3 Instability: 0 Special Hazards: None

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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