



## Safety Data Sheet

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### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Scotch-Weld™ Core Reinforcement Adhesive EC-3903

#### Product Identification Numbers

62-3903-7501-2, 62-3903-8540-9, 62-3903-9541-6, 87-2500-0244-8

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

##### Recommended use

Adhesive

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Aerospace and Commercial Transportation Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	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 2B.  
Skin Corrosion/Irritation: Category 2.  
Skin Sensitizer: Category 1.  
Reproductive Toxicity: Category 1B.  
Carcinogenicity: 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 eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

May cause drowsiness or dizziness.

May damage fertility or the unborn child.

May cause cancer.

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.

Contaminated work clothing must not be allowed out of the workplace.

#### 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 skin irritation or rash occurs: Get medical advice/attention.

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.

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.

41% of the mixture consists of ingredients of unknown acute inhalation toxicity.

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

Ingredient	C.A.S. No.	% by Wt
TOLUENE	108-88-3	30 - 50 Trade Secret *
EPOXY RESIN	25036-25-3	20 - 40 Trade Secret *
ETHYL ALCOHOL	64-17-5	10 - 30 Trade Secret *
POLYVINYL ALCOHOL/FORMALDEHYDE/POLYVINYL ACETATE COPOLYMER	63450-15-7	1 - 5
DICYANDIAMIDE	461-58-5	1 - 5
3-(P-CHLOROPHENYL)-1,1-DIMETHYLUREA	150-68-5	0.5 - 1.5
WATER	7732-18-5	0.5 - 1.5
METHYL ALCOHOL	67-56-1	0.4 - 0.7 Trade Secret *
METHYL ISOBUTYL KETONE	108-10-1	< 0.5 Trade Secret *
C.I. SOLVENT YELLOW 3	97-56-3	< 0.25 Trade Secret *
PETROLEUM DISTILLATE	64742-89-8	< 0.17

\*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:**

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**

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-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Cyanide	During Combustion
Oxides of Nitrogen	During Combustion
Toxic Vapor, Gas, Particulate	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. 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. An appropriate aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

For industrial or professional use only. 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. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. 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 container tightly closed. Keep cool. 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
METHYL ISOBUTYL KETONE	108-10-1	ACGIH	TWA:20 ppm;STEL:75 ppm	A3: Confirmed animal carcin.
METHYL ISOBUTYL KETONE	108-10-1	OSHA	TWA:410 mg/m <sup>3</sup> (100 ppm)	
TOLUENE	108-88-3	CMRG	STEL:75 ppm	Skin Notation
TOLUENE	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human carcin
TOLUENE	108-88-3	OSHA	TWA:200 ppm;CEIL:300 ppm	
ETHYL ALCOHOL	64-17-5	OSHA	TWA:1900 mg/m <sup>3</sup> (1000 ppm)	
ETHYL ALCOHOL	64-17-5	ACGIH	STEL:1000 ppm	A3: Confirmed animal carcin.
PETROLEUM DISTILLATE	64742-89-8	CMRG	TWA:300 ppm	
METHYL ALCOHOL	67-56-1	ACGIH	TWA:200 ppm;STEL:250 ppm	Skin Notation
METHYL ALCOHOL	67-56-1	OSHA	TWA:260 mg/m <sup>3</sup> (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.

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 and particulates

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>General Physical Form:</b>	Liquid
<b>Odor, Color, Grade:</b>	green, mild solvent odor
<b>Odor threshold</b>	<i>No Data Available</i>
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>No Data Available</i>
<b>Boiling Point</b>	173.00 °F [ @ 1 atm]
<b>Flash Point</b>	40.00 °F [ @ 1 atm] [ <i>Test Method:</i> Closed Cup]
<b>Evaporation rate</b>	<=7.00 [ <i>Ref Std:</i> ETHER=1]
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Flammable Limits(LEL)</b>	1.27 % volume
<b>Flammable Limits(UEL)</b>	19.00 % volume
<b>Vapor Pressure</b>	42.1000 mmHg [ @ 20 °C]
<b>Vapor Density</b>	3.50 [ <i>Ref Std:</i> AIR=1]
<b>Specific Gravity</b>	0.960 [ <i>Ref Std:</i> WATER=1]
<b>Solubility- non-water</b>	<i>No Data Available</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>No Data Available</i>
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Decomposition temperature</b>	<i>No Data Available</i>
<b>Viscosity</b>	100 - 300 centipoise
<b>Hazardous Air Pollutants</b>	30 - 60 % weight
<b>Volatile Organic Compounds</b>	546 g/l [ <i>Test Method:</i> calculated SCAQMD rule 443.1]
<b>Percent volatile</b>	58 % weight
<b>VOC Less H2O &amp; Exempt Solvents</b>	553 g/l [ <i>Test Method:</i> calculated SCAQMD rule 443.1]

## 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

Amines

## 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:**

May be harmful if inhaled.

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.

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

##### **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.

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.

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.

**Carcinogenicity:**

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
C.I. SOLVENT YELLOW 3	97-56-3	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
C.I. SOLVENT YELLOW 3	97-56-3	Anticipated human carcinogen	National Toxicology Program Carcinogens
METHYL ISOBUTYL KETONE	108-10-1	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

**Additional Information:**

This product contains ethanol. Alcoholic beverages and ethanol in alcoholic beverages have been classified by the International Agency for Research on Cancer as carcinogenic to humans. There are also data associating human consumption of alcoholic beverages with developmental toxicity and liver toxicity. Exposure to ethanol during the foreseeable use of this product is not expected to cause cancer, developmental toxicity, or liver toxicity.

**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 20 - 50 mg/l
Overall product	Ingestion		No data available; calculated ATE > 5,000 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
EPOXY RESIN	Dermal	Rat	LD50 > 1,600 mg/kg
EPOXY RESIN	Ingestion	Rat	LD50 > 1,000 mg/kg
ETHYL ALCOHOL	Dermal	Rabbit	LD50 > 15,800 mg/kg
ETHYL ALCOHOL	Inhalation-Vapor (4 hours)	Rat	LC50 124.7 mg/l
ETHYL ALCOHOL	Ingestion	Rat	LD50 17,800 mg/kg
POLYVINYL ALCOHOL/FORMALDEHYDE/POLYVINYL ACETATE COPOLYMER	Dermal	Rabbit	LD50 > 2,000 mg/kg
POLYVINYL ALCOHOL/FORMALDEHYDE/POLYVINYL ACETATE COPOLYMER	Ingestion	Rat	LD50 > 5,010 mg/kg
DICYANDIAMIDE	Dermal	Rabbit	LD50 > 10,000 mg/kg
DICYANDIAMIDE	Ingestion	Rat	LD50 > 30,000 mg/kg
3-(P-CHLOROPHENYL)-1,1-DIMETHYLUREA	Dermal	Rabbit	LD50 > 2,500 mg/kg
3-(P-CHLOROPHENYL)-1,1-DIMETHYLUREA	Ingestion	Rat	LD50 1,480 mg/kg
METHYL ALCOHOL	Dermal		LD50 estimated to be 1,000 - 2,000 mg/kg
METHYL ALCOHOL	Inhalation-Vapor		LC50 estimated to be 10 - 20 mg/l
METHYL ALCOHOL	Ingestion		LD50 estimated to be 50 - 300 mg/kg
METHYL ISOBUTYL KETONE	Dermal	Rabbit	LD50 > 16,000 mg/kg
METHYL ISOBUTYL KETONE	Inhalation-Vapor (4 hours)	Rat	LC50 >8.2,<16.4 mg/l
METHYL ISOBUTYL KETONE	Ingestion	Rat	LD50 3,038 mg/kg
PETROLEUM DISTILLATE	Dermal	Rabbit	LD50 3,000 mg/kg
PETROLEUM DISTILLATE	Inhalation-Vapor (4 hours)	Rat	LC50 > 5.2 mg/l



PETROLEUM DISTILLATE	Ingestion	Rat	LD50 > 5,000 mg/kg
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ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
TOLUENE	Rabbit	Irritant
EPOXY RESIN	Rabbit	Mild irritant
ETHYL ALCOHOL	Rabbit	No significant irritation
DICYANDIAMIDE	Human and animal	Minimal irritation
3-(P-CHLOROPHENYL)-1,1-DIMETHYLUREA	similar compounds	Mild irritant
METHYL ALCOHOL	Rabbit	Mild irritant
METHYL ISOBUTYL KETONE	Rabbit	Mild irritant
PETROLEUM DISTILLATE	Rabbit	Irritant

**Serious Eye Damage/Irritation**

Name	Species	Value
TOLUENE	Rabbit	Moderate irritant
EPOXY RESIN	Rabbit	Moderate irritant
ETHYL ALCOHOL	Rabbit	Moderate irritant
DICYANDIAMIDE	Professional judgement	Mild irritant
3-(P-CHLOROPHENYL)-1,1-DIMETHYLUREA	similar compounds	Moderate irritant
METHYL ALCOHOL	Rabbit	Moderate irritant
METHYL ISOBUTYL KETONE	Rabbit	Mild irritant
PETROLEUM DISTILLATE	Rabbit	No significant irritation

**Skin Sensitization**

Name	Species	Value
TOLUENE	Guinea pig	Not sensitizing
EPOXY RESIN	Human and animal	Sensitizing
ETHYL ALCOHOL	Human	Some positive data exist, but the data are not sufficient for classification
DICYANDIAMIDE	Guinea pig	Some positive data exist, but the data are not sufficient for classification
METHYL ALCOHOL	Guinea pig	Not sensitizing
METHYL ISOBUTYL KETONE	Guinea pig	Not sensitizing

**Respiratory Sensitization**

Name	Species	Value
EPOXY RESIN	Human	Some positive data exist, but the data are not sufficient for classification

**Germ Cell Mutagenicity**

Name	Route	Value
TOLUENE	In Vitro	Not mutagenic
TOLUENE	In vivo	Not mutagenic
EPOXY RESIN	In vivo	Not mutagenic
EPOXY RESIN	In Vitro	Some positive data exist, but the data are not

		sufficient for classification
ETHYL ALCOHOL	In Vitro	Some positive data exist, but the data are not sufficient for classification
ETHYL ALCOHOL	In vivo	Some positive data exist, but the data are not sufficient for classification
DICYANDIAMIDE	In Vitro	Not mutagenic
3-(P-CHLOROPHENYL)-1,1-DIMETHYLUREA	In Vitro	Some positive data exist, but the data are not sufficient for classification
3-(P-CHLOROPHENYL)-1,1-DIMETHYLUREA	In vivo	Some positive data exist, but the data are not sufficient for classification
METHYL ALCOHOL	In Vitro	Some positive data exist, but the data are not sufficient for classification
METHYL ALCOHOL	In vivo	Some positive data exist, but the data are not sufficient for classification
METHYL ISOBUTYL KETONE	In Vitro	Not mutagenic
PETROLEUM DISTILLATE	In Vitro	Not mutagenic

### Carcinogenicity

Name	Route	Species	Value
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
EPOXY RESIN	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
ETHYL ALCOHOL	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
DICYANDIAMIDE	Ingestion	Rat	Not carcinogenic
3-(P-CHLOROPHENYL)-1,1-DIMETHYLUREA	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
METHYL ALCOHOL	Inhalation	Multiple animal species	Not carcinogenic
METHYL ISOBUTYL KETONE	Inhalation	Multiple animal species	Carcinogenic
PETROLEUM DISTILLATE	Dermal	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
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
EPOXY RESIN	Ingestion	Not toxic to female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
EPOXY RESIN	Ingestion	Not toxic to male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
EPOXY RESIN	Dermal	Not toxic to development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
EPOXY RESIN	Ingestion	Not toxic to development	Rat	NOAEL 750 mg/kg/day	2 generation

ETHYL ALCOHOL	Inhalation	Not toxic to development	Rat	NOAEL 38 mg/l	during gestation
ETHYL ALCOHOL	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 5,200 mg/kg/day	prematuring & during gestation
DICYANDIAMIDE	Ingestion	Not toxic to female reproduction	Rat	NOAEL 1,000 mg/kg/day	prematuring & during gestation
DICYANDIAMIDE	Ingestion	Not toxic to male reproduction	Rat	NOAEL 1,000 mg/kg/day	44 days
DICYANDIAMIDE	Ingestion	Not toxic to development	Rat	NOAEL 1,000 mg/kg/day	prematuring & during gestation
3-(P-CHLOROPHENYL)-1,1-DIMETHYLUREA	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	LOAEL 215 mg/kg/day	during gestation
METHYL ALCOHOL	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,600 mg/kg/day	21 days
METHYL ALCOHOL	Ingestion	Toxic to development	Mouse	LOAEL 4,000 mg/kg/day	during organogenesis
METHYL ALCOHOL	Inhalation	Toxic to development	Mouse	NOAEL 1.3 mg/l	during organogenesis
METHYL ISOBUTYL KETONE	Inhalation	Not toxic to female reproduction	Multiple animal species	NOAEL 8.2 mg/l	2 generation
METHYL ISOBUTYL KETONE	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	13 weeks
METHYL ISOBUTYL KETONE	Inhalation	Some positive male reproductive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 8.2 mg/l	2 generation
METHYL ISOBUTYL KETONE	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL 12.3 mg/l	during organogenesis

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
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
ETHYL ALCOHOL	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	LOAEL 2.6 mg/l	30 minutes
ETHYL ALCOHOL	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	LOAEL 9.4 mg/l	not available
ETHYL ALCOHOL	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL not available	
ETHYL ALCOHOL	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 3,000 mg/kg	
3-(P-CHLOROPHENYL)-1,1-DIMETHYLUREA	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for	similar compound	NOAEL Not available	

			classification	ds		
3-(P-CHLOROPHENYL)-1,1-DIMETHYLUREA	Ingestion	methemoglobinemia	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	not applicable
METHYL ALCOHOL	Inhalation	blindness	Causes damage to organs	Human	NOAEL Not available	occupational exposure
METHYL ALCOHOL	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
METHYL ALCOHOL	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	6 hours
METHYL ALCOHOL	Ingestion	blindness	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
METHYL ALCOHOL	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
METHYL ISOBUTYL KETONE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	LOAEL 0.10 mg/l	2 hours
METHYL ISOBUTYL KETONE	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL 0.9 mg/l	7 minutes
METHYL ISOBUTYL KETONE	Inhalation	vascular system	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL Not available	not available
METHYL ISOBUTYL KETONE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Rat	LOAEL 900 mg/kg	not applicable
PETROLEUM DISTILLATE	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
PETROLEUM DISTILLATE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
TOLUENE	Inhalation	auditory system   nervous system   eyes   olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
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	Mouse	NOAEL 105	28 days

			data are not sufficient for classification		mg/kg/day	
TOLUENE	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 105 mg/kg/day	4 weeks
EPOXY RESIN	Dermal	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	2 years
EPOXY RESIN	Dermal	nervous system	All data are negative	Rat	NOAEL 1,000 mg/kg/day	13 weeks
EPOXY RESIN	Ingestion	auditory system   heart   endocrine system   hematopoietic system   liver   eyes   kidney and/or bladder	All data are negative	Rat	NOAEL 1,000 mg/kg/day	28 days
ETHYL ALCOHOL	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 124 mg/l	365 days
ETHYL ALCOHOL	Inhalation	hematopoietic system   immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25 mg/l	14 days
ETHYL ALCOHOL	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 8,000 mg/kg/day	4 months
ETHYL ALCOHOL	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 3,000 mg/kg/day	7 days
DICYANDIAMIDE	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 6,822 mg/kg/day	13 weeks
3-(P-CHLOROPHENYL)-1,1-DIMETHYLUREA	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Mouse	LOAEL 800 mg/kg/day	103 weeks
3-(P-CHLOROPHENYL)-1,1-DIMETHYLUREA	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 65 mg/kg/day	103 weeks
3-(P-CHLOROPHENYL)-1,1-DIMETHYLUREA	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 520 mg/kg/day	13 weeks
METHYL ALCOHOL	Inhalation	liver	All data are negative	Rat	NOAEL 6.55 mg/l	4 weeks
METHYL ALCOHOL	Inhalation	respiratory system	All data are negative	Rat	NOAEL 13.1 mg/l	6 weeks
METHYL ALCOHOL	Ingestion	liver   nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	90 days
METHYL ISOBUTYL KETONE	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.41 mg/l	13 weeks
METHYL ISOBUTYL KETONE	Inhalation	heart	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 0.8 mg/l	2 weeks
METHYL ISOBUTYL KETONE	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 0.4 mg/l	90 days
METHYL ISOBUTYL KETONE	Inhalation	respiratory system	All data are negative	Multiple animal species	NOAEL 4.1 mg/l	14 weeks
METHYL ISOBUTYL KETONE	Inhalation	endocrine system   hematopoietic system	All data are negative	Multiple animal species	NOAEL 0.41 mg/l	90 days
METHYL ISOBUTYL KETONE	Inhalation	nervous system	All data are negative	Multiple animal species	NOAEL 0.41 mg/l	13 weeks
METHYL ISOBUTYL	Ingestion	endocrine system	Some positive data exist, but the	Rat	NOAEL	13 weeks

KETONE		hematopoietic system   liver   kidney and/or bladder	data are not sufficient for classification		1,000 mg/kg/day	
METHYL ISOBUTYL KETONE	Ingestion	heart   immune system   muscles   nervous system   respiratory system	All data are negative	Rat	NOAEL 1,040 mg/kg/day	120 days

**Aspiration Hazard**

Name	Value
TOLUENE	Aspiration hazard
METHYL ISOBUTYL KETONE	Some positive data exist, but the data are not sufficient for classification
PETROLEUM DISTILLATE	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 uncured product in a permitted waste incineration facility. 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)

**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	30 - 50
C.I. SOLVENT YELLOW 3 (Benzenamine, 2-methyl-4-[2-(2-methylphenyl)diazenyl]-)	97-56-3	< 0.25
C.I. SOLVENT YELLOW 3	97-56-3	< 0.25

**15.2. State Regulations**

Contact 3M for more information.

**California Proposition 65**

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
METHYL ISOBUTYL KETONE	108-10-1	Carcinogen
TOLUENE	108-88-3	Female reproductive toxin
TOLUENE	108-88-3	Developmental Toxin
METHYL ALCOHOL	67-56-1	Developmental Toxin
C.I. SOLVENT YELLOW 3	97-56-3	Carcinogen

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

WARNING: This product contains a chemical known to the State of California to cause cancer.

**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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