

# **Safety Data Sheet**

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## **SECTION 1: Identification**

### 1.1. Product identifier

3M<sup>TM</sup> Lapping Vehicle, Extender Blue Lube, WS-171

### 1.2. Recommended use and restrictions on use

#### Recommended use

Industrial use

1.3. Supplier's details

**MANUFACTURER:** 3M

**DIVISION:** Abrasive Systems 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 3.

Serious Eye Damage/Irritation: Category 2A.

Reproductive Toxicity: Category 2.

Carcinogenicity: Category 2.

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

Specific Target Organ Toxicity (central nervous system): Category 3.

### 2.2. Label elements

## Signal word

Danger

#### **Symbols**

Flame | Exclamation mark | Health Hazard |

## **Pictograms**







#### **Hazard Statements**

Flammable liquid and vapor.

Causes serious eye irritation.

May cause drowsiness or dizziness.

Suspected of damaging fertility or the unborn child.

Suspected of causing cancer.

Causes damage to organs: 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 exposed or concerned: Get medical advice/attention.

Specific treatment (see Notes to Physician on this label).

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.

#### Notes to Physician:

This product contains methanol. If there is a reasonable suspicion of methanol poisoning, intravenous (IV) administration with either fomepizole (preferred) or ethanol (if fomepizole is unavailable) should be considered as part of the medical

management.

#### 2.3. Hazards not otherwise classified

None.

12% of the mixture consists of ingredients of unknown acute inhalation toxicity.

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

| Ingredient             | C.A.S. No. | % by Wt                |
|------------------------|------------|------------------------|
| Ethyl Alcohol          | 64-17-5    | 50 - 70 Trade Secret * |
| Isopropyl Alcohol      | 67-63-0    | 10 - 30 Trade Secret * |
| Propylene Glycol       | 57-55-6    | 5 - 15 Trade Secret *  |
| Methyl Isobutyl Ketone | 108-10-1   | 0 - 5 Trade Secret *   |
| Methyl Alcohol         | 67-56-1    | 0 - 5 Trade Secret *   |
| Water                  | 7732-18-5  | 0 - 5                  |

<sup>\*</sup>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.

### **Eve Contact:**

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

### If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

### 4.3. Indication of any immediate medical attention and special treatment required

This product contains methanol. If there is a reasonable suspicion of methanol poisoning, intravenous (IV) administration with either fomepizole (preferred) or ethanol (if fomepizole is unavailable) should be considered as part of the medical management.

## **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**

**Substance** Carbon monoxide Carbon dioxide

Condition

**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

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. 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               | <b>Additional Comments</b> |
|------------------------|------------|--------|--------------------------|----------------------------|
| 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/m3(100 ppm)   |                            |
| Propylene Glycol       | 57-55-6    | AIHA   | TWA(as aerosol):10 mg/m3 |                            |
| Ethyl Alcohol          | 64-17-5    | ACGIH  | STEL:1000 ppm            | A3: Confirmed animal       |
|                        |            |        |                          | carcin.                    |
| Ethyl Alcohol          | 64-17-5    | OSHA   | TWA:1900 mg/m3(1000 ppm) |                            |
| Methyl Alcohol         | 67-56-1    | ACGIH  | TWA:200 ppm;STEL:250 ppm | Skin Notation              |
| Methyl Alcohol         | 67-56-1    | OSHA   | TWA:260 mg/m3(200 ppm)   |                            |
| Isopropyl Alcohol      | 67-63-0    | ACGIH  | TWA:200 ppm;STEL:400 ppm | A4: Not class. as human    |
|                        |            |        |                          | carcin                     |
| Isopropyl Alcohol      | 67-63-0    | OSHA   | TWA:980 mg/m3(400 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: Butyl Rubber

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

**General Physical Form:** 

Odor, Color, Grade: Sweet Alcohol-like Odor / Blu-ish Colored Liquid

**Odor threshold** No Data Available Not Applicable pН **Melting point** Not Applicable 173.3°F **Boiling Point** 

**Flash Point** 80 °F [Test Method: Pensky-Martens Closed Cup]

**Evaporation rate** No Data Available Not Applicable Flammability (solid, gas)

Flammable Limits(LEL) 3.3 % Flammable Limits(UEL) 19 %

**Vapor Pressure** 50 mmHg [@ 68 °F] **Vapor Density** 1.5 [*Ref Std:* AIR=1] **Specific Gravity** 0.8 [Ref Std: WATER=1] Solubility In Water No Data Available Solubility- non-water No Data Available No Data Available Partition coefficient: n-octanol/ water

752 °F **Autoignition temperature** 

Viscosity No Data Available **Volatile Organic Compounds** 6.54 lb/gal Percent volatile 97.97 % **VOC Less H2O & Exempt Solvents** 796.77 g/l

## **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

Sparks and/or flames

Heat

### 10.5. Incompatible materials

Strong oxidizing agents

### 10.6. Hazardous decomposition products

**Substance** Condition

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:**

Dermal Defatting: Signs/symptoms may include localized redness, itching, drying and cracking of skin.

#### **Eye Contact:**

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

#### **Ingestion:**

May be harmful if swallowed.

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.

May cause blindness.

### 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.

| <u>Ingredient</u>      | CAS No.  | Class Description             | Regulation                                  |
|------------------------|----------|-------------------------------|---|
| 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        | Inhalation- |         | No data available; calculated ATE > 50 mg/l  |
| •                      | Vapor(4 hr) |         |  |
| Overall product        | Ingestion   |         | No data available; calculated ATE 2,000 - 5,000  |
| •                      |             |         | mg/kg  |
| Ethyl Alcohol          | Dermal      | Rabbit  | LD50 > 15,800 mg/kg  |
| Ethyl Alcohol          | Inhalation- | Rat     | LC50 124.7 mg/l  |
| •                      | Vapor (4    |         |  |
|                        | hours)      |         |  |
| Ethyl Alcohol          | Ingestion   | Rat     | LD50 17,800 mg/kg  |
| Isopropyl Alcohol      | Dermal      | Rabbit  | LD50 12,870 mg/kg  |
| Isopropyl Alcohol      | Inhalation- | Rat     | LC50 72.6 mg/l   |
| 1 17                   | Vapor (4    |         | Č  |
|                        | hours)      |         |  |
| Isopropyl Alcohol      | Ingestion   | Rat     | LD50 4,710 mg/kg   |
| Propylene Glycol       | Dermal      | Rabbit  | LD50 20,800 mg/kg  |
| Propylene Glycol       | Ingestion   | Rat     | LD50 22,000 mg/kg  |
| Methyl Alcohol         | Dermal      |         | LD50 estimated to be 1,000 - 2,000 mg/kg   |
| Methyl Alcohol         | Inhalation- |         | LC50 estimated to be 10 - 20 mg/l  |
| •                      | Vapor       |         | , and the second |
| 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- | Rat     | LC50 >8.2,<16.4 mg/l   |
| , ,                    | Vapor (4    |         | , ,  |
|                        | hours)      |         |  |
| Methyl Isobutyl Ketone | Ingestion   | Rat     | LD50 3,038 mg/kg   |

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

| Name                   | Species  | Value                     |
|------------------------|----------|---------------------------|
|                        |          |                           |
| Ethyl Alcohol          | Rabbit   | No significant irritation |
| Isopropyl Alcohol      | Multiple | No significant irritation |
|                        | animal   |                           |
|                        | species  |                           |
| Propylene Glycol       | Rabbit   | No significant irritation |
| Methyl Alcohol         | Rabbit   | Mild irritant             |
| Methyl Isobutyl Ketone | Rabbit   | Mild irritant             |

Serious Eye Damage/Irritation

| Serious Eye Damage/Irritation |         |                           |
|-------------------------------|---------|---------------------------|
| Name                          | Species | Value                     |
|                               |         |                           |
| Ethyl Alcohol                 | Rabbit  | Moderate irritant         |
| Isopropyl Alcohol             | Rabbit  | Severe irritant           |
| Propylene Glycol              | Rabbit  | No significant irritation |
| Methyl Alcohol                | Rabbit  | Moderate irritant         |
| Methyl Isobutyl Ketone        | Rabbit  | Mild irritant             |

## **Skin Sensitization**

| Name                   | Species    | Value  |
|------------------------|------------|--|
| Ethyl Alcohol          | Human      | Some positive data exist, but the data are not sufficient for classification |
| Isopropyl Alcohol      | Guinea pig | Not sensitizing  |
| Propylene Glycol       | Human      | 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**

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

**Germ Cell Mutagenicity** 

| Name                   | Route    | Value  |  |  |
|------------------------|----------|--|--|--|
| 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 |  |  |
| Isopropyl Alcohol      | In Vitro | Not mutagenic  |  |  |
| Isopropyl Alcohol      | In vivo  | Not mutagenic  |  |  |
| Propylene Glycol       | In Vitro | Not mutagenic  |  |  |
| Propylene Glycol       | In vivo  | Not mutagenic  |  |  |
| 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  |  |  |

Carcinogenicity

| Name                   | Route      | Species                       | Value  |
|------------------------|------------|-------------------------------|--|
| Ethyl Alcohol          | Ingestion  | Multiple<br>animal<br>species | Some positive data exist, but the data are not sufficient for classification |
| Isopropyl Alcohol      | Inhalation | Rat                           | Some positive data exist, but the data are not sufficient for classification |
| Propylene Glycol       | Dermal     | Mouse                         | Not carcinogenic   |
| Propylene Glycol       | Ingestion  | Multiple<br>animal<br>species | Not carcinogenic   |
| Methyl Alcohol         | Inhalation | Multiple<br>animal<br>species | Not carcinogenic   |
| Methyl Isobutyl Ketone | Inhalation | Multiple<br>animal<br>species | Carcinogenic   |

## Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name              | Route      | Value  | Species                       | Test Result                  | Exposure<br>Duration         |
|-------------------|------------|--|-------------------------------|------------------------------|------------------------------|
| Ethyl Alcohol     | Inhalation | Not toxic to development   | Rat                           | NOAEL 38<br>mg/l             | during<br>gestation          |
| Ethyl Alcohol     | Ingestion  | Some positive developmental data exist,<br>but the data are not sufficient for<br>classification | Rat                           | NOAEL<br>5,200<br>mg/kg/day  | premating & during gestation |
| Isopropyl Alcohol | Ingestion  | Some positive developmental data exist,<br>but the data are not sufficient for<br>classification | Rat                           | NOAEL 400<br>mg/kg/day       | during<br>organogenesi<br>s  |
| Isopropyl Alcohol | Inhalation | Some positive developmental data exist,<br>but the data are not sufficient for<br>classification | Rat                           | LOAEL 9<br>mg/l              | during<br>gestation          |
| Propylene Glycol  | Ingestion  | Not toxic to female reproduction   | Mouse                         | NOAEL<br>10,100<br>mg/kg/day | 2 generation                 |
| Propylene Glycol  | Ingestion  | Not toxic to male reproduction   | Mouse                         | NOAEL<br>10,100<br>mg/kg/day | 2 generation                 |
| Propylene Glycol  | Ingestion  | Not toxic to development   | Multiple<br>animal<br>species | NOAEL<br>1,230<br>mg/kg/day  | during<br>organogenesi<br>s  |
| Methyl Alcohol    | Ingestion  | Some positive male reproductive data exist, but the data are not sufficient for classification   | Rat                           | NOAEL<br>1,600<br>mg/kg/day  | 21 days                      |

| Methyl Alcohol         | Ingestion  | Toxic to development   | Mouse                         | LOAEL 4,000<br>mg/kg/day    | during<br>organogenesi<br>s |
|------------------------|------------|--|-------------------------------|-----------------------------|-----------------------------|
| Methyl Alcohol         | Inhalation | Toxic to development   | Mouse                         | NOAEL 1.3<br>mg/l           | during<br>organogenesi<br>s |
| Methyl Isobutyl Ketone | Inhalation | Not toxic to female reproduction   | Multiple<br>animal<br>species | NOAEL 8.2<br>mg/l           | 2 generation                |
| Methyl Isobutyl Ketone | Ingestion  | Some positive male reproductive data exist, but the data are not sufficient for classification   | Rat                           | NOAEL<br>1,000<br>mg/kg/day | 13 weeks                    |
| Methyl Isobutyl Ketone | Inhalation | Some positive male reproductive data exist, but the data are not sufficient for classification   | Multiple<br>animal<br>species | NOAEL 8.2<br>mg/l           | 2 generation                |
| Methyl Isobutyl Ketone | Inhalation | Some positive developmental data exist,<br>but the data are not sufficient for<br>classification | Mouse                         | NOAEL 12.3<br>mg/l          | during<br>organogenesi<br>s |

# Target Organ(s)

**Specific Target Organ Toxicity - single exposure** 

| Name                   | Route      | Target Organ(s)                      | Value  | Species                       | Test Result            | Exposure<br>Duration      |
|------------------------|------------|--------------------------------------|--|-------------------------------|------------------------|---------------------------|
| Ethyl Alcohol          | Inhalation | central nervous<br>system depression | May cause drowsiness or dizziness  | Human                         | LOAEL 2.6<br>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<br>mg/l      | not available             |
| Ethyl Alcohol          | Ingestion  | central nervous<br>system depression | May cause drowsiness or dizziness  | Multiple<br>animal<br>species | NOAEL not available    |                           |
| Ethyl Alcohol          | Ingestion  | kidney and/or<br>bladder             | Some positive data exist, but the data are not sufficient for classification | Dog                           | NOAEL<br>3,000 mg/kg   |                           |
| Isopropyl Alcohol      | Inhalation | central nervous<br>system depression | May cause drowsiness or dizziness  | Human                         | NOAEL Not available    |                           |
| Isopropyl Alcohol      | Inhalation | respiratory irritation               | Some positive data exist, but the data are not sufficient for classification | Human                         | NOAEL Not<br>available |                           |
| Isopropyl Alcohol      | Inhalation | auditory system                      | Some positive data exist, but the data are not sufficient for classification | Guinea<br>pig                 | NOAEL 13.4<br>mg/l     | 24 hours                  |
| Isopropyl Alcohol      | Ingestion  | central nervous<br>system depression | May cause drowsiness or dizziness  | Human                         | NOAEL Not<br>available | poisoning<br>and/or abuse |
| Propylene Glycol       | Ingestion  | central nervous<br>system depression | May cause drowsiness or dizziness  | Human                         | NOAEL Not available    | poisoning<br>and/or abuse |
| Methyl Alcohol         | Inhalation | blindness                            | Causes damage to organs  | Human                         | NOAEL Not<br>available | occupational exposure     |
| Methyl Alcohol         | Inhalation | central nervous<br>system depression | May cause drowsiness or dizziness  | Human                         | NOAEL Not<br>available | not available             |
| Methyl Alcohol         | Inhalation | respiratory irritation               | Some positive data exist, but the data are not sufficient for classification | Rat                           | NOAEL Not<br>available | 6 hours                   |
| Methyl Alcohol         | Ingestion  | blindness                            | Causes damage to organs  | Human                         | NOAEL Not<br>available | poisoning<br>and/or abuse |
| Methyl Alcohol         | Ingestion  | central nervous<br>system depression | May cause drowsiness or dizziness  | Human                         | NOAEL Not<br>available | poisoning<br>and/or abuse |
| Methyl Isobutyl Ketone | Inhalation | central nervous<br>system depression | May cause drowsiness or dizziness  | Human                         | LOAEL 0.10<br>mg/l     | 2 hours                   |
| Methyl Isobutyl Ketone | Inhalation | respiratory irritation               | May cause respiratory irritation   | Human                         | NOAEL 0.9<br>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<br>available | not available             |
| Methyl Isobutyl Ketone | Ingestion  | central nervous<br>system depression | May cause drowsiness or dizziness  | Rat                           | LOAEL 900<br>mg/kg     | not applicable            |

**Specific Target Organ Toxicity - repeated exposure** 

| Name                   | Route      | Target Organ(s)   | Value  | Species                       | Test Result                 | Exposure<br>Duration |
|------------------------|------------|---|--|-------------------------------|-----------------------------|----------------------|
| Ethyl Alcohol          | Inhalation | liver   | Some positive data exist, but the data are not sufficient for classification | Rabbit                        | LOAEL 124<br>mg/l           | 365 days             |
| Ethyl Alcohol          | Inhalation | hematopoietic<br>system   immune<br>system  | Some positive data exist, but the data are not sufficient for classification | Rat                           | NOAEL 25<br>mg/l            | 14 days              |
| Ethyl Alcohol          | Ingestion  | liver   | Some positive data exist, but the data are not sufficient for classification | Rat                           | LOAEL<br>8,000<br>mg/kg/day | 4 months             |
| Ethyl Alcohol          | Ingestion  | kidney and/or<br>bladder  | Some positive data exist, but the data are not sufficient for classification | Dog                           | NOAEL<br>3,000<br>mg/kg/day | 7 days               |
| Isopropyl Alcohol      | Inhalation | kidney and/or<br>bladder  | Some positive data exist, but the data are not sufficient for classification | Rat                           | NOAEL 12.3<br>mg/l          | 24 months            |
| Isopropyl Alcohol      | Inhalation | nervous system  | All data are negative  | Rat                           | NOAEL 12<br>mg/l            | 13 weeks             |
| Isopropyl Alcohol      | Ingestion  | kidney and/or<br>bladder  | Some positive data exist, but the data are not sufficient for classification | Rat                           | NOAEL 400<br>mg/kg/day      | 12 weeks             |
| Propylene Glycol       | Ingestion  | hematopoietic<br>system   | Some positive data exist, but the data are not sufficient for classification | Multiple<br>animal<br>species | NOAEL<br>1,370<br>mg/kg/day | 117 days             |
| Propylene Glycol       | Ingestion  | kidney and/or<br>bladder  | All data are negative  | Dog                           | NOAEL<br>5,000<br>mg/kg/day | 104 weeks            |
| Methyl Alcohol         | Inhalation | liver   | All data are negative  | Rat                           | NOAEL 6.55<br>mg/l          | 4 weeks              |
| Methyl Alcohol         | Inhalation | respiratory system  | All data are negative  | Rat                           | NOAEL 13.1<br>mg/l          | 6 weeks              |
| Methyl Alcohol         | Ingestion  | liver   nervous<br>system   | Some positive data exist, but the data are not sufficient for classification | Rat                           | NOAEL<br>2,500<br>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<br>mg/l          | 13 weeks             |
| Methyl Isobutyl Ketone | Inhalation | heart   | Some positive data exist, but the data are not sufficient for classification | Multiple<br>animal<br>species | NOAEL 0.8<br>mg/l           | 2 weeks              |
| Methyl Isobutyl Ketone | Inhalation | kidney and/or<br>bladder  | Some positive data exist, but the data are not sufficient for classification | Multiple<br>animal<br>species | NOAEL 0.4<br>mg/l           | 90 days              |
| Methyl Isobutyl Ketone | Inhalation | respiratory system  | All data are negative  | Multiple<br>animal<br>species | NOAEL 4.1<br>mg/l           | 14 weeks             |
| Methyl Isobutyl Ketone | Inhalation | endocrine system  <br>hematopoietic<br>system                                       | All data are negative  | Multiple<br>animal<br>species | NOAEL 0.41<br>mg/l          | 90 days              |
| Methyl Isobutyl Ketone | Inhalation | nervous system  | All data are negative  | Multiple<br>animal<br>species | NOAEL 0.41<br>mg/l          | 13 weeks             |
| Methyl Isobutyl Ketone | Ingestion  | endocrine system  <br>hematopoietic<br>system   liver  <br>kidney and/or<br>bladder | Some positive data exist, but the data are not sufficient for classification | Rat                           | NOAEL<br>1,000<br>mg/kg/day | 13 weeks             |
| Methyl Isobutyl Ketone | Ingestion  | heart   immune<br>system   muscles  <br>nervous system  <br>respiratory system      | All data are negative  | Rat                           | NOAEL<br>1,040<br>mg/kg/day | 120 days             |

## **Aspiration Hazard**

| Name |       |
|------|-------|
|      | Value |
|      |       |

| Methyl Isobutyl Ketone | Some positive data exist, but the data are not sufficient for |  |
|------------------------|---|--|
|                        | classification  |  |

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. 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 <a href="http://3M.com/Transportinfo">http://3M.com/Transportinfo</a> 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):

| Ingredient             | <u>C.A.S. No</u> | % by Wt |  |
|------------------------|------------------|---------|--|
| Methyl Isobutyl Ketone | 108-10-1         | 0 - 5   |  |
| Methyl Alcohol         | 67-56-1          | 0 - 5   |  |

### 15.2. State Regulations

Contact 3M for more information.

## 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.

 Document Group:
 31-1193-7
 Version Number:
 1.05

 Issue Date:
 05/18/15
 Supercedes Date:
 02/25/15

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