

# **Safety Data Sheet**

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# **SECTION 1: Identification**

## 1.1. Product identifier

3M<sup>TM</sup> Red Lube, Green Lube, WS-175

## 1.2. Recommended use and restrictions on use

## Recommended use

Lapping vehicle; Extender

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. Acute Toxicity (oral): Category 4.

Serious Eye Damage/Irritation: Category 2B.

Reproductive Toxicity: 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**

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#### **Hazard Statements**

Flammable liquid and vapor.

Harmful if swallowed.

Causes eye irritation.

May cause drowsiness or dizziness.

Suspected of damaging fertility or the unborn child.

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.

Rinse mouth.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

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. Methanol poisoning can cause metabolic acidosis, blindness, and death. Onset of signs or symptoms may be delayed for 18 to 24 hours. If methanol poisoning is confirmed, intravenous (IV) administration of ethanol should be considered. Additional pharmacologic and supportive care should be based on the treating physician's judgement.

#### 2.3. Hazards not otherwise classified

None.

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

Ingredient	C.A.S. No.	% by Wt
Propylene Glycol	57-55-6	85 - 95 Trade Secret *
Methyl Alcohol	67-56-1	5 - 15 Trade Secret *
Sodium Nitrite	7632-00-0	< 0.10

<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.

#### **Eye 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. Methanol poisoning can cause metabolic acidosis, blindness, and death. Onset of signs or symptoms may be delayed for 18 to 24 hours. If methanol poisoning is confirmed, intravenous (IV) administration of ethanol should be considered. Additional pharmacologic and supportive care should be based on the treating physician's judgement.

# **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**

SubstanceConditionAldehydesDuring Combustion

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Carbon monoxide Carbon dioxide **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.

# 6.3. Methods and material for containment and cleaning up

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible.

# **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

For industrial or professional use only. Avoid breathing of dust created by sanding, grinding or machining. 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 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	<b>Additional Comments</b>
Propylene Glycol	57-55-6	AIHA	TWA(as aerosol):10 mg/m3	
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) |

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

Provide appropriate local exhaust ventilation for sanding, grinding or machining. 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

#### 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 Half facepiece or full facepiece supplied-air respirator

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: Mild Astringent Odor / Green or Red Liquid

Odor thresholdNo Data AvailablepHNot ApplicableMelting pointNot Applicable

**Boiling Point** 148 °F **Flash Point** 110 °F

Evaporation rateNo Data AvailableFlammability (solid, gas)Not ApplicableFlammable Limits(LEL)2.6 g/m3Flammable Limits(UEL)36.5 g/m3

Vapor Pressure 8 mmHg [@ 68 °F]

Vapor Density 2.5

Specific Gravity 1.018 [Ref Std: WATER=1]

Partition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNo Data AvailableViscosityNo Data Available

Volatile Organic Compounds1,000 g/lPercent volatile100 %VOC Less H2O & Exempt Solvents1,000 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

Heat

Sparks and/or flames

## 10.5. Incompatible materials

Strong oxidizing agents Strong acids

## 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.

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Dust from grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

#### **Skin Contact:**

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

### **Eye Contact:**

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

Dust created by grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

### **Ingestion:**

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.

## **Toxicological Data**

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

# **Acute Toxicity**

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Inhalation-		No data available; calculated ATE > 50 mg/l
	Vapor(4 hr)		
Overall product	Ingestion		No data available; calculated ATE 300 - 2,000 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		
Methyl Alcohol	Ingestion		LD50 estimated to be 50 - 300 mg/kg

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species	Value
Propylene Glycol	Rabbit	No significant irritation
Methyl Alcohol	Rabbit	Mild irritant

**Serious Eye Damage/Irritation** 

Name Species Value
--------------------

Propylene Glycol	Rabbit	No significant irritation
Methyl Alcohol	Rabbit	Moderate irritant

# **Skin Sensitization**

Name	Species	Value
Propylene Glycol	Human	Some positive data exist, but the data are not sufficient for classification
Methyl Alcohol	Guinea	Not sensitizing
	pig	

# **Respiratory Sensitization**

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

**Germ Cell Mutagenicity** 

Germ Cen Mutagementy		
Name	Route	Value
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

# Carcinogenicity

Name	Route	Species	Value
Propylene Glycol	Dermal	Mouse	Not carcinogenic
Propylene Glycol	Ingestion	Multiple	Not carcinogenic
		animal	
		species	
Methyl Alcohol	Inhalation	Multiple	Not carcinogenic
		animal	
		species	

# **Reproductive Toxicity**

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Propylene Glycol	Ingestion	Not toxic to female reproduction	Mouse	NOAEL 10,100 mg/kg/day	2 generation
Propylene Glycol	Ingestion	Not toxic to male reproduction	Mouse	NOAEL 10,100 mg/kg/day	2 generation
Propylene Glycol	Ingestion	Not toxic to development	Multiple animal species	NOAEL 1,230 mg/kg/day	during organogenesi s
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 organogenesi s
Methyl Alcohol	Inhalation	Toxic to development	Mouse	NOAEL 1.3 mg/l	during organogenesi s

# Target Organ(s)

**Specific Target Organ Toxicity - single exposure** 

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Propylene Glycol	Ingestion	central nervous	May cause drowsiness or	Human	NOAEL Not	poisoning

		system depression	dizziness		available	and/or abuse
Methyl Alcohol	Inhalation	blindness	Causes damage to organs	Human	NOAEL Not	occupational
					available	exposure
Methyl Alcohol	Inhalation	central nervous	May cause drowsiness or	Human	NOAEL Not	not available
		system depression	dizziness		available	
Methyl Alcohol	Inhalation	respiratory irritation	Some positive data exist, but the	Rat	NOAEL Not	6 hours
			data are not sufficient for		available	
			classification			
Methyl Alcohol	Ingestion	blindness	Causes damage to organs	Human	NOAEL Not	poisoning
					available	and/or abuse
Methyl Alcohol	Ingestion	central nervous	May cause drowsiness or	Human	NOAEL Not	poisoning
		system depression	dizziness		available	and/or abuse

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Propylene Glycol	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 1,370 mg/kg/day	117 days
Propylene Glycol	Ingestion	kidney and/or bladder	All data are negative	Dog	NOAEL 5,000 mg/kg/day	104 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

### **Aspiration Hazard**

For the component/components, either no data are currently available or 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)

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# **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>	% by Wt
Methyl Alcohol	67-56-1	5 - 15

This material contains a chemical which requires export notification under TSCA Section 12[b]:

<u>Ingredient (Category if applicable)</u>	C.A.S. No	Regulation	<b>Status</b>
Sodium Nitrite (ALKALI METAL NITRITES	7632-00-0	Toxic Substances Control Act (TSCA) 5	Applicable
FOR USE IN METALWORKING FLUIDS		SNUR or Consent Order Chemicals	
CONTAINING AMINES)			
Sodium Nitrite	7632-00-0	Toxic Substances Control Act (TSCA) 5	Applicable
		SNUR or Consent Order Chemicals	

This material contains a chemical regulated by an EPA Significant New Use Rule (TSCA Section 5)

<u>Ingredient (Category if applicable)</u>	C.A.S. No	Reference
Sodium Nitrite	7632-00-0	40CFR721.4740

# 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: 2 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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