

# Safety Data Sheet

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## **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>TM</sup> High Strength Red Threadlocker, 08730

**Product Identification Numbers** LB-K000-0570-0, 60-4550-6752-4, 60-9800-2824-9

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

**Recommended use** Automotive, Adhesive

1.3. Supplier's details	
MANUFACTURER:	3M
<b>DIVISION:</b>	Automotive Aftermarket
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**

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

#### 2.1. Hazard classification

Serious Eye Damage/Irritation: Category 2A. Skin Corrosion/Irritation: Category 2. Skin Sensitizer: Category 1. Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements Signal word Danger

Symbols Exclamation mark | Health Hazard | **Pictograms** 



Hazard Statements Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction.

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

#### **Precautionary Statements**

General:

Keep out of reach of children.

#### **Prevention:**

Do not breathe dust/fume/gas/mist/vapors/spray. Wear eye/face protection. Wear protective gloves. 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 IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Get medical advice/attention if you feel unwell.

#### Storage:

Keep cool.

#### **Disposal:**

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

# **2.3.** Hazards not otherwise classified

None.

18% of the mixture consists of ingredients of unknown acute oral toxicity.22% of the mixture consists of ingredients of unknown acute dermal toxicity.73% of the mixture consists of ingredients of unknown acute inhalation toxicity.

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

Ingredient	C.A.S. No.	% by Wt
Polyethylene Glycol Dimethacrylate	25852-47-5	60 - 90 Trade Secret *
Polyester Resin	Trade Secret*	10 - 30 Trade Secret *

Cumene Hydroperoxide	80-15-9	1 - 5 Trade Secret *
Saccharin	81-07-2	1 - 5 Trade Secret *
Polyethylene	9002-88-4	1 - 5 Trade Secret *
Synthetic Amorphous Silica, Fumed, Crystalline Free	112945-52-5	1 - 5 Trade Secret *

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

### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

#### Skin Contact:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

#### Eye Contact:

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

#### If Swallowed:

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

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

## **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable extinguishing media

In case of fire: Use a carbon dioxide or dry chemical extinguisher to extinguish.

#### 5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

#### 5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

## **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. 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.

#### 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. Place in a closed 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

Keep out of reach of children. 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. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Keep away from reactive metals (eg. Aluminum, zinc etc.) to avoid the formation of hydrogen gas that could create an explosion hazard.

#### 7.2. Conditions for safe storage including any incompatibilities

Protect from sunlight. Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidizing agents. Store in a dry place.

## **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>
SILICA, AMORPHOUS	112945-52-	OSHA	TWA concentration:0.8	
	5		mg/m3;TWA:20 millions of	
			particles/cu. ft.	
Cumene Hydroperoxide	80-15-9	AIHA	TWA:6 mg/m3(1 ppm)	Skin Notation
ACCILL, American Conference of Com		T		

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.

#### **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 Fluoroelastomer

#### **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:	Liquid	
Odor, Color, Grade:	Red paste, mild organic odor	
Odor threshold	No Data Available	
pH	Not Applicable	
Melting point	Not Applicable	
Boiling Point	> 300 °F	
Flash Point	>=212 °F [Test Method: Cleveland Open Cup]	
Flash Point	Flash point > 93 °C (200 °F)	
Evaporation rate	Nil	
Flammability (solid, gas)	Not Applicable	
Flammable Limits(LEL)	No Data Available	
Flammable Limits(UEL)	No Data Available	
Vapor Pressure	> 5 mmHg	
Vapor Density	1.01 [ <i>Ref Std:</i> AIR=1]	
Density	1.07 - 1.15 g/ml	
Specific Gravity	1.07 - 1.15 [ <i>Ref Std:</i> WATER=1]	
Solubility- non-water	No Data Available	
Partition coefficient: n-octanol/ water	No Data Available	
Autoignition temperature	No Data Available	
Decomposition temperature	No Data Available	
Viscosity	No Data Available	
Hazardous Air Pollutants	0.09 % weight [Test Method: Calculated]	
Volatile Organic Compounds	0.28 lb/gal [ <i>Test Method:</i> calculated SCAQMD rule 443.1]	
Volatile Organic Compounds	3.1 % weight [ <i>Test Method:</i> calculated per CARB title 2]	
Volatile Organic Compounds	33 g/l [Test Method: calculated SCAQMD rule 443.1]	
Percent volatile	3.17 %	
VOC Less H2O & Exempt Solvents	33 g/l [Test Method: 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 may occur.

#### **10.4. Conditions to avoid** Heat Sparks and/or flames

#### 10.5. Incompatible materials

Strong acids Strong oxidizing agents Aluminum Al or Mg powder and high/shear temperature conditions Alkali and alkaline earth metals Metal powder Reducing agents Strong bases Zinc

#### 10.6. Hazardous decomposition products

Substance Carbon monoxide Carbon dioxide Oxides of Nitrogen <u>Condition</u> Not Specified Not Specified Not Specified

## **SECTION 11: Toxicological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

#### Based on test data and/or information on the components, this material may produce the following health effects:

#### Inhalation:

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 target organ effects after inhalation.

#### **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:**

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.

#### **Target Organ Effects:**

#### Prolonged or repeated exposure may cause:

Prolonged or repeated exposure by inhalation may cause:

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.

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

#### **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 2,000 - 5,000 mg/kg
Polyethylene Glycol Dimethacrylate	Dermal		LD50 estimated to be $> 5,000 \text{ mg/kg}$
Polyethylene Glycol Dimethacrylate	Ingestion	Rat	LD50 > 5,000 mg/kg
Saccharin	Ingestion	Mouse	LD50 17,000 mg/kg
Polyethylene	Dermal		LD50 estimated to be $> 5,000 \text{ mg/kg}$
Polyethylene	Ingestion	Rat	LD50 > 2,000 mg/kg
Cumene Hydroperoxide	Dermal	Rat	LD50 500 mg/kg
Cumene Hydroperoxide	Inhalation- Vapor (4 hours)	Rat	LC50 1.4 mg/l
Cumene Hydroperoxide	Ingestion	Rat	LD50 382 mg/kg
Synthetic Amorphous Silica, Fumed, Crystalline Free	Dermal	Rabbit	LD50 > 5,000 mg/kg
Synthetic Amorphous Silica, Fumed, Crystalline Free	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Synthetic Amorphous Silica, Fumed, Crystalline Free	Ingestion	Rat	LD50 > 5,110  mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value
Overall product		Irritant
Polyethylene		No significant irritation
Cumene Hydroperoxide	Rabbit	Corrosive
Synthetic Amorphous Silica, Fumed, Crystalline Free	Rabbit	No significant irritation

#### Serious Eye Damage/Irritation

Name	Species	Value
Cumene Hydroperoxide	Rabbit	Corrosive
Synthetic Amorphous Silica, Fumed, Crystalline Free	Rabbit	No significant irritation

#### Skin Sensitization

Name	Species	Value
Synthetic Amorphous Silica, Fumed, Crystalline Free	Human	Not sensitizing
	and	
	animal	

#### **Respiratory Sensitization**

Name Species Value	_			
	Nar	ne	Species	Value

#### Germ Cell Mutagenicity

Name	Route	Value
Cumene Hydroperoxide	In vivo	Not mutagenic
Cumene Hydroperoxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
Synthetic Amorphous Silica, Fumed, Crystalline Free	In Vitro	Not mutagenic

#### Carcinogenicity

Name	Route	Species	Value
Polyethylene	Not Specified	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Synthetic Amorphous Silica, Fumed, Crystalline Free	Not Specified	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
Synthetic Amorphous Silica, Fumed,	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509	1 generation
Crystalline Free				mg/kg/day	
Synthetic Amorphous Silica, Fumed,	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497	1 generation
Crystalline Free				mg/kg/day	
Synthetic Amorphous Silica, Fumed,	Ingestion	Not toxic to development	Rat	NOAEL	during
Crystalline Free				1,350	organogenesi
				mg/kg/day	S

#### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Cumene Hydroperoxide	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	occupational exposure
Cumene Hydroperoxide	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure

#### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Cumene Hydroperoxide	Inhalation	nervous system   respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.2 mg/l	7 days
Cumene Hydroperoxide	Inhalation	heart   liver   kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.03 mg/l	90 days
Synthetic Amorphous Silica, Fumed, Crystalline Free	Inhalation	respiratory system   silicosis	All data are negative	Human	NOAEL Not available	occupational exposure

# Aspiration Hazard Name

Value

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.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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.

## **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 - No 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	C.A.S. No	<u>% by Wt</u>
Saccharin	81-07-2	1 - 5
Cumene Hydroperoxide	80-15-9	1 - 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: 1 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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