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## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product name:</b>	<b>BONDERITE L-FM 3015 FORMING LUBRICANT ACHESON known as MULTAN 3015</b>	<b>IDH number:</b>	594286
<b>Product type:</b>	Water Soluble Cooling Lubricants for Metal Working	<b>Region:</b>	United States
<b>Restriction of Use:</b>	None identified	<b>Contact information:</b>	
<b>Company address:</b>	Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067	Telephone:	(860) 571-5100
		MEDICAL EMERGENCY Phone:	Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711
		TRANSPORT EMERGENCY Phone:	CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887
		Internet:	www.henkelna.com

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**WARNING:** CAUSES SKIN IRRITATION.  
MAY CAUSE AN ALLERGIC SKIN REACTION.  
CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1

### PICTOGRAM(S)



### Precautionary Statements

<b>Prevention:</b>	Avoid breathing vapors, mist, or spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear eye and face protection. Wear protective gloves.
<b>Response:</b>	IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing.
<b>Storage:</b>	Not prescribed
<b>Disposal:</b>	Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Amine soap	Unknown	10 - 30
Triethanolamine	102-71-6	10 - 30
Amine borate	Proprietary	1 - 5
Triazine compound	Proprietary	1 - 5
Diethanolamine	111-42-2	1 - 5

\* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

<b>Inhalation:</b>	If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.
<b>Skin contact:</b>	For skin contact flush with large amounts of water. Obtain medical attention if irritation persists.
<b>Eye contact:</b>	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
<b>Ingestion:</b>	Seek medical advice. DO NOT induce vomiting unless directed to do so by medical personnel.
<b>Symptoms:</b>	See Section 11.

### 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Use media appropriate for surrounding material.
<b>Special firefighting procedures:</b>	Wear full protective clothing. Wear self-contained breathing apparatus.
<b>Unusual fire or explosion hazards:</b>	This product is an aqueous mixture which will not burn.
<b>Hazardous combustion products:</b>	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen.

### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

<b>Environmental precautions:</b>	Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up. Do not allow product to enter sewer or waterways.
<b>Clean-up methods:</b>	Absorb spill with inert material. Shovel material into appropriate container for disposal.

## 7. HANDLING AND STORAGE

**Handling:** Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Do not take internally. For industrial use only. Do not mix this product with fluids which contain NITRITES/NITRATES. NITROSAMINE may be formed.

**Storage:** For safe storage, store between 40 °F (4.4 °C) and 100 °F (37.8 °C). Keep the container tightly closed and in a cool, well-ventilated place. Thaw and mix thoroughly if frozen.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Amine soap	None	None	None	None
Triethanolamine	5 mg/m <sup>3</sup> TWA	None	None	None
Amine borate	None	None	None	None
Triazine compound	None	None	None	None
Diethanolamine	1 mg/m <sup>3</sup> TWA Inhalable fraction and vapor. (SKIN) Inhalable fraction and vapor.	None	None	None

**Engineering controls:** Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

**Respiratory protection:** If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

**Eye/face protection:** Wear safety glasses; chemical goggles (if splashing is possible).

**Skin protection:** Chemical resistant, impermeable gloves. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron and boots are recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	liquid
<b>Color:</b>	Light amber
<b>Odor:</b>	Amine
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	9.1 - 9.4 (5% solution)
<b>Vapor pressure:</b>	Not determined
<b>Boiling point/range:</b>	212 °F (100°C) calculated
<b>Melting point/ range:</b>	Not determined
<b>Specific gravity:</b>	1.03 - 1.05 at 16 °C (60.8 °F)
<b>Vapor density:</b>	Not applicable
<b>Flash point:</b>	Not applicable
<b>Flammable/Explosive limits - lower:</b>	Not applicable
<b>Flammable/Explosive limits - upper:</b>	Not applicable
<b>Autoignition temperature:</b>	Not applicable
<b>Evaporation rate:</b>	Not determined
<b>Solubility in water:</b>	Complete
<b>Partition coefficient (n-octanol/water):</b>	Not determined
<b>VOC content:</b>	Not available.
<b>Viscosity:</b>	Not available.
<b>Decomposition temperature:</b>	Not available.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable at normal conditions.
<b>Hazardous reactions:</b>	Will not occur.
<b>Hazardous decomposition products:</b>	Upon decomposition, this product may yield oxides of nitrogen and ammonia, carbon dioxide, carbon monoxide and other low molecular weight hydrocarbons.
<b>Incompatible materials:</b>	This product reacts with acids.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	Do not mix this product with nitrites or other nitrosating agents because a carcinogenic nitrosamine may be formed.

## 11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Skin, Inhalation, Eyes

### Potential Health Effects/Symptoms

<b>Inhalation:</b>	Inhalation of vapors or mists of the product may be irritating to the respiratory system.
<b>Skin contact:</b>	This product may cause irritation to the skin. A component in this product may be absorbed through the skin in harmful amounts. Prolonged contact with this product may cause allergic skin sensitization reactions.
<b>Eye contact:</b>	This product may cause irritation to the eyes.
<b>Ingestion:</b>	Ingestion of this product is unlikely. However, ingestion of product may produce gastrointestinal irritation and disturbances.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Amine soap	None	No Data
Triethanolamine	Oral LD50 (RAT) = 8.0 g/kg Dermal LD50 (RABBIT) = > 20,000 mg/kg	Irritant, Allergen
Amine borate	None	Cardiac, Central nervous system, Developmental, Gastrointestinal, Irritant, Kidney, Metabolic, Reproductive
Triazine compound	None	Irritant, Allergen
Diethanolamine	Oral LD50 (RAT) = 710 mg/kg Oral LD50 (RAT) = 1.82 g/kg	Allergen, Blood, Brain, Central nervous system, Corrosive, Heart, Irritant, Kidney, Liver, Respiratory, Spleen

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Amine soap	No	No	No
Triethanolamine	No	No	No
Amine borate	No	No	No
Triazine compound	No	No	No
Diethanolamine	No	Group 2B	No

## 12. ECOLOGICAL INFORMATION

**Ecological information:** No data available.

### 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

**Recommended method of disposal:** Follow all local, state, federal and provincial regulations for disposal.

**Hazardous waste number:** Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA.

### 14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

#### U.S. Department of Transportation Ground (49 CFR)

**Proper shipping name:** RQ, Environmentally hazardous substances, liquid, n.o.s.  
**Hazard class or division:** 9  
**Identification number:** UN 3082  
**Packing group:** III  
**DOT Hazardous Substance(s):** Diethanolamine

#### International Air Transportation (ICAO/IATA)

**Proper shipping name:** Environmentally hazardous substance, liquid, n.o.s.  
**Hazard class or division:** 9  
**Identification number:** UN 3082  
**Packing group:** III

#### Water Transportation (IMO/IMDG)

**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class or division:** 9  
**Identification number:** UN 3082  
**Packing group:** III

### 15. REGULATORY INFORMATION

#### United States Regulatory Information

**TSCA 8 (b) Inventory Status:** All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

**TSCA 12 (b) Export Notification:** Triazine compound (CAS# 4719-04-4).

**CERCLA/SARA Section 302 EHS:** None above reporting de minimis  
**CERCLA/SARA Section 311/312:** Immediate Health, Delayed Health  
**CERCLA/SARA Section 313:** This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Diethanolamine (CAS# 111-42-2).

**CERCLA Reportable quantity:** Diethanolamine (CAS# 111-42-2) 100 lbs. (45.4 kg)

**California Proposition 65:** This product contains a chemical known in the State of California to cause cancer.

**Export Restrictions:** This product is controlled for export by the United States Department of Commerce. The Export Classification Control Number (ECCN) is 1C995.a.2.a

#### Canada Regulatory Information

**CEPA DSL/NDL Status:** One or more components are not listed on, and are not exempt from listing on either the Domestic Substances List or the Non-Domestic Substances List.

### 16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

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