



Revision Number: 001.2

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: BONDERITE L-FM F 1009 FORMING LUBRICANT ACHESON known as MULTAN F 1009
Product type/use: Lubricant
Restriction of Use: None identified
Company address: Henkel Corporation
 One Henkel Way
 Rocky Hill, Connecticut 06067

IDH number: 593040

Region: United States

Contact information:
 Telephone: +1 (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

DANGER: CAUSES SKIN IRRITATION.
 CAUSES SERIOUS EYE DAMAGE.
 SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
SERIOUS EYE DAMAGE	1
REPRODUCTIVE TOXICITY	2

PICTOGRAM(S)



Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash affected area thoroughly after handling. Wear protective gloves, clothing, eye and face protection.

Response: 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 exposed or concerned: Get medical attention. If skin irritation occurs: Get medical attention. Take off contaminated clothing.

Storage: Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

9 % of the mixture consists of ingredient(s) of unknown acute toxicity.

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*
Fatty acids, tall-oil, amine soap	Proprietary	10 - 30
Triethanolamine	102-71-6	10 - 30
Alkoxylated alcohol	Unknown	5 - 10
Fatty acids, tall-oil, compds. with 2-(2-aminoethoxy)ethanol	216593-48-5	1 - 5
Boric acid (H3BO3), compd. with 2-(2-aminoethoxy)	124756-59-8	1 - 5

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation:	If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.
Skin contact:	Immediately wash skin thoroughly with soap and water. If symptoms develop and persist, get medical attention.
Eye contact:	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Ingestion:	Get immediate medical attention. DO NOT induce vomiting unless directed to do so by medical personnel.
Symptoms:	See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Use media appropriate for surrounding material.
Special firefighting procedures:	Wear full protective clothing. Wear self-contained breathing apparatus.
Unusual fire or explosion hazards:	This product is an aqueous mixture which will not burn.
Hazardous combustion products:	Irritating and toxic gases or fumes may be released during a fire.

6. ACCIDENTAL RELEASE MEASURES

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

Environmental precautions:	Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up. Surfaces may become slippery after spillage.
Clean-up methods:	Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of according to Federal, State and local governmental regulations.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Do not take internally. For industrial use only.

Storage: For safe storage, store between 40 °F (4.4 °C) and 90 °F (32.2 °C)
Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. 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
Fatty acids, tall-oil, amine soap	None	None	None	None
Triethanolamine	5 mg/m ³ TWA	None	None	None
Alkoxylated alcohol	None	None	None	None
Fatty acids, tall-oil, compds. with 2-(2-aminoethoxy)ethanol	None	None	None	None
Boric acid (H ₃ BO ₃), compd. with 2-(2-aminoethoxy)	None	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

Physical state:	Liquid
Color:	Light amber
Odor:	Bland
Odor threshold:	Not available.
pH:	8.3 - 8.9 (5% solution)
Vapor pressure:	Not determined
Boiling point/range:	> 100 °C (> 212°F)calculated
Melting point/ range:	Not determined
Specific gravity:	1.06 - 1.09
Vapor density:	Not determined
Flash point:	Not applicable
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Autoignition temperature:	Not applicable
Flammability:	Not applicable
Evaporation rate:	Not available.
Solubility in water:	Complete
Partition coefficient (n-octanol/water):	Not available.
VOC content:	Not determined
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Incompatible materials:	This product may react with strong reducing agents. This product may react with strong oxidizing agents.
Reactivity:	Not available.
Conditions to avoid:	Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation:	Inhalation of vapors or mists of the product may be irritating to the respiratory system. Excessive inhalation of this material causes headache, dizziness, nausea and incoordination.
Skin contact:	Prolonged and/or repeated skin contact with this product may cause irritation/dermatitis. This product contains a component that may cause allergic skin reactions.
Eye contact:	This product may cause irritation to the eyes.
Ingestion:	Ingestion of this product may cause nausea, vomiting and diarrhea. May cause dizziness, incoordination, headache, nausea, and vomiting.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Fatty acids, tall-oil, amine soap	None	Allergen, Irritant
Triethanolamine	Oral LD50 (Rat) = 8.0 g/kg Dermal LD50 (Rabbit) = > 20,000 mg/kg	Irritant, Allergen
Alkoxylated alcohol	None	No Data
Fatty acids, tall-oil, compds. with 2-(2-aminoethoxy)ethanol	None	No Data
Boric acid (H3BO3), compd. with 2-(2-aminoethoxy)	None	Cardiac, Central nervous system, Developmental, Gastrointestinal, Irritant, Kidney, Metabolic, Reproductive

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Fatty acids, tall-oil, amine soap	No	No	No
Triethanolamine	No	No	No
Alkoxylated alcohol	No	No	No
Fatty acids, tall-oil, compds. with 2-(2-aminoethoxy)ethanol	No	No	No
Boric acid (H3BO3), compd. with 2-(2-aminoethoxy)	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Do not empty into drains / surface water / ground water.

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. Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

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: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

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: Fatty acids, tall-oil, compounds with 2-(2-aminoethoxy)ethanol (CAS# 216593-48-5). Amine borates (CAS# 124756-59-8).

CERCLA/SARA Section 302 EHS: None above reporting de minimis.
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health
CERCLA/SARA Section 313: None above reporting de minimis.

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

Additional Regulatory Information: 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.

Prepared by: Regulatory Affairs

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