Safety Data Sheet



Revision Number: 001.3

Issue date: 06/07/2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

Product type: **Restriction of Use:** Company address: Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067

BONDERITE L-FG F 31 GRAPHITE FORGING LUBRICANT ACHESON known as DELTAFORGE F-31 Lubricant None identified

IDH number:

1224661

Region: **United States** Contact information: 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 NOT CLASSIFIED. READ ENTIRE SAFETY DATA SHEET.

HAZARD CLASS HAZARD CATEGORY None None

PICTOGRAM(S)

None

Precautionary Statements

Prevention:	Not prescribed
Response:	Not prescribed
Storage:	Not prescribed
Disposal:	Not prescribed

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*
Graphite	7782-42-5	10 - 30

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

4. FIRST AID MEASURES		
Inhalation:	If inhaled, immediately remove the affected person to fresh air. If symptoms develop and persist, get medical attention.	
Skin contact:	Immediately wash skin thoroughly with soap and water. If symptoms develop and persist, get medical attention.	
Eye contact:	Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.	
Ingestion:	Get immediate medical attention. Do not induce vomiting.	
Symptoms:	See Section 11.	
Notes to physician:	Treat symptomatically and supportively.	

5. FIRE FIGHTING MEASURES

Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Wear full protective clothing. Wear self-contained breathing apparatus.
Unusual fire or explosion hazards:	Not a fire hazard. This product is an aqueous mixture which will not burn.
Hazardous combustion products:	Thermal decomposition can lead to release of irritating gases and vapors.

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. Do not allow product to enter sewer or waterways.	
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. Avoid breathing vapors or mists of	

	this product. Use only with adequate ventilation.
Storage:	For safe storage, store between 5.0 °C (41°F) and 30.0 °C (86°F) Keep container closed. Store in a cool, dry, well-ventilated area. Storage within given temperature limit Outside temperature limits, the properties of the product will change. Protect from direct sunlight. Keep from freezing. Protect from freezing.

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
Graphite	2 mg/m3 TWA Respirable fraction.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust. 15 MPPCF TWA	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 s	Wear safety glasses; chemical goggles (if splashing is possible).		
Skin protection:	Suitable	Suitable protective clothing		

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:
Color:
Odor:
Odor threshold:
pH:
Vapor pressure:
Boiling point/range:
Melting point/ range:
Specific gravity:
Vapor density:
Flash point:
Flammable/Explosive limits - lower:
Flammable/Explosive limits - upper:
Autoignition temperature:
Flammability:
Evaporation rate:
Solubility in water:
Partition coefficient (n-octanol/water):
VOC content:
Viscosity:
Decomposition temperature:
-

Liquid Black Ammonia Not available. 11.0 - 11.5 Not determined > 100 °C (> 212°F) <= 0 °C (<= 32°F) 1.05 - 1.15 Not available. Not applicable Not available. Not available. Not applicable Not applicable Not available. Disperses in water as a suspension Not determined Not applicable 700 - 1,000 mPa.s Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Hazardous reactions:	None under normal processing.
Hazardous decomposition products:	Thermal decomposition can lead to release of irritating gases and vapors.
Incompatible materials:	This product may react with strong acids or oxidizing agents.
Reactivity:	Not available.
Conditions to avoid:	Avoid excessive heat and ignition sources. Freezing conditions.

Product name: BONDERITE L-FG F 31 GRAPHITE FORGING LUBRICANT ACHESON known as DELTAFORGE F-31

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation:	May cause respiratory tract irritation.
Skin contact:	May cause skin irritation.
Eye contact:	May cause irritation. This product may be severely irritating to the eyes.
Ingestion:	Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Hazardous Component(s)	LD50s and LC50s		Immediate and Delayed Health Effects	
Graphite	None		Lung	
Hazardous Component(s)	NTP Carcinogen	IARC Ca	rcinogen	OSHA Carcinogen (Specifically Regulated)
Graphite	No	N	0	No

12. ECOLOGICAL INFORMATION

Ecological information:

Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Hazardous waste number:

Recommended method of disposal:

Dispose of according to Federal, State and local governmental regulations.

It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24.

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	Not regulated
Proper shipping name:	None
Hazard class or division:	None
Identification number:	None
Packing group:	None
Water Transportation (IMO/IMDG) Proper shipping name: Hazard class or division: Identification number: Packing group:	Not regulated None None None

15. REGULATORY INFORMATION

United States Regulatory Information

	16. OTHER INFORMATION
CEPA DSL/NDSL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
Canada Regulatory Information	
California Proposition 65:	This product contains a chemical known in the State of California to cause cancer.
CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA Section 313:	None above reporting de minimis. Immediate Health None above reporting de minimis.
TSCA 12 (b) Export Notification:	None above reporting de minimis
TSCA 8 (b) Inventory Status:	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

This safety data sheet contains changes from the previous version in sections: This Safety Data Sheet contains changes from the previous version in Section(s): 2,3,9,11

Prepared by: Jennifer Mckay, Regulatory Affairs Specialist

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