



Revision Number: 004.1

Issue date: 03/27/2019

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	BONDERITE L-FG 4258 GRAPHITE FORGING LUBRICANT ACHESON known as P3 FORGE 4258	IDH number:	922292
Product type/use:	Lubricant	Region:	United States
Restriction of Use:	None identified	Contact information:	
Company address:	Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067	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

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

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
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. If eye irritation persists: 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.

2 % 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.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Graphite	7782-42-5	10 - 30
Borax	1330-43-4	1 - 5
Phosphoric acid	7664-38-2	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 symptoms are experienced, remove source of contamination or move victim to fresh air. If symptoms develop and persist, get medical attention.
Skin contact:	For skin contact flush with large amounts of water. Obtain medical attention if irritation persists.
Eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. If symptoms develop and persist, get medical attention.
Ingestion:	Get immediate medical attention. DO NOT induce vomiting unless directed to do so by medical personnel. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.
Symptoms:	See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Use media appropriate for surrounding material.
Special firefighting procedures:	Wear self-contained breathing apparatus. Wear full protective clothing.
Unusual fire or explosion hazards:	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 personal protective equipment. Surfaces may become slippery after spillage.
Clean-up methods:	Collect spilled material with an inert absorbent such as sand or vermiculite. Place in properly labeled closed container. Flush area with water to remove trace residue. Dispose of according to Federal, State and local governmental regulations.

7. HANDLING AND STORAGE

Handling:	Avoid contact with eyes, skin and clothing. Provide adequate ventilation. Avoid breathing vapors or mists of this product. Wash thoroughly after handling.
Storage:	For safe storage, store at or above 40 °F (4.4 °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
Graphite	2 mg/m3 TWA Respirable fraction.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust. 15 MPPCF TWA	None	None
Borax	2 mg/m3 TWA Inhalable fraction. 6 mg/m3 STEL Inhalable fraction.	None	None	None
Phosphoric acid	3 mg/m3 STEL 1 mg/m3 TWA	1 mg/m3 PEL	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 chemical goggles; face shield (if splashing is possible).

Skin protection:

Chemical resistant, impermeable gloves. Use of impervious apron and boots are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Black
Odor:	Mild
Odor threshold:	Not available.
pH:	6.2 - 6.4
Vapor pressure:	Not determined
Boiling point/range:	212 °F (100°C)
Melting point/ range:	Not determined
Specific gravity:	1.26 - 1.29 at 25 °C (77°F)
Vapor density:	Not determined
Flash point:	Not applicable
Flammable/Explosive limits - lower:	Not applicable
Flammable/Explosive limits - upper:	Not applicable
Autoignition temperature:	Not applicable
Flammability:	Not applicable
Evaporation rate:	Not determined
Solubility in water:	Complete
Partition coefficient (n-octanol/water):	Not determined
VOC content:	Not available.
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Hazardous reactions:	None under normal processing.
Hazardous decomposition products:	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Incompatible materials:	This product may react with strong acids or 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:	May cause respiratory tract irritation.
Skin contact:	This product may cause irritation to the skin.
Eye contact:	This product may cause irritation to the eyes.
Ingestion:	Ingestion of this product may cause nausea, vomiting and diarrhea.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Graphite	None	Lung
Borax	Oral LD50 (Rat) = 2,660 mg/kg Dermal LD50 (Rabbit) = > 1,055 mg/kg	Irritant, Skin, Less weight gain and food intake.
Phosphoric acid	Oral LD50 (Rat) = 1,530 mg/kg Dermal LD50 (Rabbit) = 2,740 mg/kg	Irritant, Corrosive

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Graphite	No	No	No
Borax	No	No	No
Phosphoric acid	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:	None above reporting de minimis
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. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada Regulatory Information

CEPA DSL/NDSL Status:	Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.
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16. OTHER INFORMATION

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

Prepared by:	Regulatory Affairs
Issue date:	03/27/2019

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