

Revision Number: 003.3 Issue date: 06/20/2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: BONDERITE L-FG 1105 SYNTHETIC FORGING LUBRICANT ACHESON

known as DELTA FORGE1105

Product type: Lubricant
Restriction of Use: None identified

Company address:
Henkel Corporation

One Henkel Way Rocky Hill, Connecticut 06067 **IDH number:** 1225027

Item number: 1225027 Region: United States

Contact information:

Telephone: +1 (860) 571-5100

MEDICAL EMERGÉNCY 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.

MAY CAUSE AN ALLERGIC SKIN REACTION.

CAUSES SERIOUS EYE IRRITATION.

CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED

EXPOSURE.

| HAZARD CLASS | HAZARD CATEGORY |
|--|-----------------|
| SKIN IRRITATION | 2 |
| EYE IRRITATION | 2A |
| SKIN SENSITIZATION | 1 |
| SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE | 1 |

PICTOGRAM(S)



Precautionary Statements

Prevention: Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Do not

eat, drink or smoke when using this product. Contaminated work clothing should not be allowed

out of the workplace. Wear protective gloves, eye protection, 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. Get medical

attention if you feel unwell. If skin irritation or rash occurs: Get medical attention. If eye irritation

persists: Get medical attention. Take off contaminated clothing.

Storage: Not prescribed

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

governmental regulations.

13 % of the mixture consists of ingredient(s) of unknown acute toxicity.

IDH number: 1225027 Product name: BONDERITE L-FG 1105 SYNTHETIC FORGING LUBRICANT ACHESON known as DELTA FORGE1105

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* |
|--|------------|-------------|
| disodium adipate | 7486-38-6 | 1 - 5 |
| Sodium hydroxide | 1310-73-2 | 1 - 5 |
| Tris(2-hydroxyethyl)hexahydro triazine | 4719-04-4 | 0.1 - 1 |

^{*} 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 inhaled, immediately remove the affected person to fresh air. Get immediate

medical attention.

Skin contact: Immediately wash skin thoroughly with soap and water. Get immediate

medical attention.

Eye contact: In case of contact with the eyes, rinse immediately with plenty of water for 15

minutes, and seek immediate medical attention.

Ingestion: Get immediate medical attention. Do not induce vomiting.

Symptoms: See Section 11.

IDH number: 1225027

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: May liberate large quantities of dense, foul-smelling smoke which may contain

unidentified toxic gasses.

Hazardous combustion products: 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.

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. Wash thoroughly after handling.

Avoid breathing vapors or mists of this product. Use only with adequate

ventilation. Do not take internally. For industrial use only.

Storage: For safe storage, store between -20 °C (-4°F) and 50 °C (122°F)

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 |
|--|-----------------|-------------|-----------|-------|
| disodium adipate | None | None | None | None |
| Sodium hydroxide | 2 mg/m3 Ceiling | 2 mg/m3 PEL | None | None |
| Tris(2-hydroxyethyl)hexahydro triazine | 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 chemical goggles; face shield (if splashing is possible).

Skin protection: Wear impervious gloves for prolonged contact. 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: Clear
Odor: Mild

Odor threshold:Not available.pH:8.5 - 9.5Vapor pressure:Not determined

Boiling point/range: 100 °C (212°F)calculated

Melting point/ range:Not available.Specific gravity:1.09 - 1.11Vapor density:< 1 (Air = 1)</th>Flash point:Not applicableFlammable/Explosive limits - lower:Not available.Flammable/Explosive limits - upper:Not available.Autoignition temperature:Not applicable

Autoignition temperature:

Flammability:

Evaporation rate:

Solubility in water:

Partition coefficient (n-octanol/water):

VOC content:

Not applicable

Not determined

Complete

Not determined

None

Viscosity: 800 - 1,200 mPa.s Decomposition temperature: Not available.

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions.

Hazardous reactions: None under normal processing.

Hazardous decomposition

products:

IDH number: 1225027

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low

molecular weight hydrocarbons. Oxides of nitrogen.

Incompatible materials: This product may react with strong acids or oxidizing agents.

Reactivity: Not available.

Conditions to avoid: Keep away from heat, ignition sources and incompatible materials.

11. TOXICOLOGICAL INFORMATION

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

Potential Health Effects/Symptoms

Inhalation: This product may cause slight irritation to the respiratory system.

Skin contact: Causes skin irritation. May cause allergic skin reaction. Prolonged and/or repeated skin contact

with this product may cause irritation/dermatitis.

Eye contact: Causes eye irritation.

Ingestion: Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

| Hazardous Component(s) | LD50s and LC50s | Immediate and Delayed Health Effects |
|--|-----------------|---|
| disodium adipate | None | Irritant, Respiratory, Nervous System, Gastrointestinal, Liver, Kidney |
| Sodium hydroxide | None | Irritant, Corrosive, Eyes |
| Tris(2-hydroxyethyl)hexahydro triazine | None | Irritant, Allergen |

| Hazardous Component(s) | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
|--|----------------|-----------------|--|
| disodium adipate | No | No | No |
| Sodium hydroxide | No | No | No |
| Tris(2-hvdroxvethvl)hexahvdro triazine | No | No | No |

12. ECOLOGICAL INFORMATION

Ecological information: None identified.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

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

must be tested using methods described in 40 CFR Part 261 to determine if it

meets applicable definitions of hazardous wastes.

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:Not regulatedHazard class or division:NoneIdentification number:NonePacking 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:
CERCLA/SARA Section 311/312:
CERCLA/SARA Section 313:

None above reporting de minimis.
None above reporting de minimis.

California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

IDH number: 1225027

CEPA DSL/NDSL Status: All other components are listed on or are exempt from listing on the Domestic Substances

List.

16. OTHER INFORMATION

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

Product name: BONDERITE L-FG 1105 SYNTHETIC FORGING LUBRICANT ACHESON known as DELTA FORGE1105

Prepared by: Regulatory Affairs

Issue date: 06/20/2018

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

IDH number: 1225027 Product name: BONDERITE L-FG 1105 SYNTHETIC FORGING LUBRICANT ACHESON known as DELTA FORGE1105