



Revision Number: 002.1

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1. PRODUCT AND COMPANY IDENTIFICATION

| | | | |
|-------------------------------|-----------------------------------|---------------------|---------------|
| Product name: | Heavy Duty Anti-Seize | IDH number: | 234353 |
| Product type: | Lubricant | Item number: | 51609 |
| | | Region: | United States |
| Company address: | Contact information: | | |
| Henkel Corporation | Telephone: 860.571.5100 | | |
| 1001 Trout Brook Crossing | Emergency telephone: 860.571.5100 | | |
| Rocky Hill, Connecticut 06067 | Internet: www.henkelna.com | | |

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

| | | | |
|------------------------|----------------|-----------------------------|--------------------|
| Physical state: | Paste | HEALTH: | 1 |
| Color: | Grey | FLAMMABILITY: | 1 |
| Odor: | Characteristic | PHYSICAL HAZARD: | 0 |
| | | Personal Protection: | See MSDS Section 8 |

CAUTION: MAY CAUSE EYE AND SKIN IRRITATION.

Relevant routes of exposure: Skin, Eyes

Potential Health Effects

| | |
|----------------------|--|
| Inhalation: | May cause respiratory tract irritation. This product has low volatility and is not expected to cause respiratory tract irritation during normal conditions of use. |
| Skin contact: | Prolonged or repeated contact may cause irritation. |
| Eye contact: | Contact with eyes will cause irritation. |
| Ingestion: | Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Principal hazard of ingestion is aspiration into the lungs and subsequent pneumonitis. |

Existing conditions aggravated by exposure: Eye, skin, and respiratory disorders.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous components | CAS NUMBER | % |
|--|------------|---------|
| Ca-fluoride | 7789-75-5 | 10 - 30 |
| Graphite | 7782-42-5 | 10 - 30 |
| Calcium distearate | 1592-23-0 | 5 - 10 |
| Distillates (petroleum), hydrotreated heavy naphthenic | 64742-52-5 | 5 - 10 |
| Mineral oil light naphthenic hydrotreat. <3% DMSO | 64742-53-6 | 5 - 10 |
| Calcium dodecylbenzene sulfonate | 26264-06-2 | 1 - 5 |
| Silica | 7631-86-9 | 0.1 - 1 |

4. FIRST AID MEASURES

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| Inhalation: | Move to fresh air. If symptoms persist, seek medical advice. |
| Skin contact: | Wash with soap and water. If symptoms develop and persist, get medical attention. |

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Ingestion: Get medical attention. Aspiration may cause pulmonary edema and pneumonitis. Do not induce vomiting.

5. FIRE FIGHTING MEASURES

Flash point: > 93 °C (> 199.4 °F)

Autoignition temperature: Not determined

Flammable/Explosive limits - lower: Not determined

Flammable/Explosive limits - upper: Not determined

Extinguishing media: Foam. Dry chemical. Carbon dioxide. Water spray or fog. Foam. Dry chemical. Carbon dioxide. Water spray or fog.

Special firefighting procedures: None None

Unusual fire or explosion hazards: None None

Hazardous combustion products: Oxides of carbon.Oxides of carbon.

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: Do not allow material to contaminate ground water system.

Clean-up methods: Scrape up as much material as possible. Clean residue with soap and water. Follow all local, state, federal and provincial regulations for disposal.

7. HANDLING AND STORAGE

Handling: Keep container closed. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Storage: Keep in a cool, well ventilated area.

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

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 components | ACGIH TLV | OSHA PEL | AIHA WEEL | OTHER |
|--|--|--|-----------|-------------------------------------|
| Ca-fluoride | 2.5 mg/m3 TWA (as F) | 2.5 mg/m3 TWA Dust. 2.5 mg/m3 TWA (as F) | None | None |
| Graphite | 2 mg/m3 TWA Respirable fraction. | 5 mg/m3 TWA Respirable fraction. 15 mg/m3 TWA Total dust. 15 MPPCF TWA | None | None |
| Calcium distearate | 10 mg/m3 TWA 3 mg/m3 TWA Respirable fraction. | None | None | None |
| Distillates (petroleum), hydrotreated heavy naphthenic | 5 mg/m3 TWA mist 10 mg/m3 STEL mist | 5 mg/m3 TWA mist | None | None |
| Mineral oil light naphthenic hydrotreat. <3% DMSO | 5 mg/m3 TWA Mist. 10 mg/m3 STEL Mist. | 500 ppm (2,000 mg/m3) TWA | None | None |
| Calcium dodecylbenzene sulfonate | None | None | None | None |
| Silica | 10 mg/m3 TWA 3 mg/m3 TWA Respirable fraction. 6 mg/m3 TWA | 20 MPPCF TWA 0.8 mg/m3 TWA | None | 3 mg/m3 TWA Respirable fraction. |

Engineering controls:

Use only with adequate ventilation. Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.

Respiratory protection:

Use NIOSH approved respirator if there is potential to exceed exposure limit(s). Observe OSHA regulations for respiratory use (29 CFR 1910.134).

Eye/face protection:

Goggles. Safety glasses with side-shields.

Skin protection:

Cover as much of the exposed skin area as possible with appropriate clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

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|---|-------------------------------------|
| Physical state: | Paste |
| Color: | Grey |
| Odor: | Characteristic |
| Odor threshold: | Not available |
| pH: | Not applicable |
| Vapor pressure: | Not available |
| Boiling point/range: | 550 °F (287.8 °C) none |
| Melting point/ range: | Not available |
| Specific gravity: | 1.18 |
| Vapor density: | Heavier than air. |
| Flash point: | > 93 °C (> 199.4 °F) |
| Flammable/Explosive limits - lower: | Not determined |
| Flammable/Explosive limits - upper: | Not determined |
| Autoignition temperature: | Not determined |
| Evaporation rate: | Not determined |
| Solubility in water: | Insoluble |
| Partition coefficient (n-octanol/water): | Not determined |
| VOC content: | Essentially Zero (Exempt Compounds) |

10. STABILITY AND REACTIVITY

| | |
|--|---------------------------------|
| Stability: | Stable at normal conditions. |
| Hazardous reactions: | Will not occur. |
| Hazardous decomposition products: | Hydrocarbons. Oxides of carbon. |
| Incompatible materials: | Oxidizing agents. |
| Conditions to avoid: | None known |

11. TOXICOLOGICAL INFORMATION

| Hazardous components | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
|--|----------------|-----------------|---|
| Ca-fluoride | No | No | No |
| Graphite | No | No | No |
| Calcium distearate | No | No | No |
| Distillates (petroleum), hydrotreated heavy naphthenic | No | No | No |
| Mineral oil light naphthenic hydrotreat. <3% DMSO | No | No | No |
| Calcium dodecylbenzene sulfonate | No | No | No |
| Silica | No | No | No |

| Hazardous components | Health Effects/Target Organs |
|--|------------------------------|
| Ca-fluoride | Teeth, Muscle, Respiratory |
| Graphite | Lung |
| Calcium distearate | No Target Organs |
| Distillates (petroleum), hydrotreated heavy naphthenic | Irritant |
| Mineral oil light naphthenic hydrotreat. <3% DMSO | Irritant |
| Calcium dodecylbenzene sulfonate | Eyes, Irritant |
| Silica | Nuisance dust |

12. ECOLOGICAL INFORMATION

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|--------------------------------|---|
| Ecological information: | No specific studies have been conducted by Henkel on the ecotoxicity or environmental fate of this material; however, commonly available data on the material indicate that uncontrolled releases to soil, ground water, or surface waters could entail acute and/or chronic ecological effects, depending on the quantity and concentration of such releases. Releases of volatile components to the atmosphere are not believed to entail significant ecological consequences provided such releases are within the exposure levels set forth in this document. Accordingly, all appropriate measures should be taken to avoid uncontrolled releases to the environment, and any spills or other uncontrolled releases which may occur should be contained and cleaned up immediately in accordance with Section 6. |
|--------------------------------|---|

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: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

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 minimus
CERCLA/SARA Section 302 EHS: None above reporting de minimus
CERCLA/SARA Section 311/312: Immediate Health
CERCLA/SARA 313: None above reporting de minimus
California Proposition 65: This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

CEPA DSL/NDL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
WHMIS hazard class: D.2.B

16. OTHER INFORMATION

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

Prepared by: C.J. Michaels, Manager, Regulatory Affairs

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