

RPL-AA2000 High Temperature Anti-Seize Grease

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Product Identification: RPL-AA2000

High Temperature Anti-Seize Grease

Supplier Identification: Davley Darmex Lubricants

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MSDS Print Date:

SECTION 2 – COMPONENT DATA

This product is a semi-solid that is insoluble in water. Direct eye contact may cause minor, short-term irritation. Short-term skin exposure is not expected to be irritating. Inhalation and ingestion are not anticipated routes of exposure during normal conditions of use.

HMIS Rating: Health: 1 Flammability: 1 Reactivity: 0 PPE: X

Components listed in this section may contribute to the potential hazards associated with exposure to the concentrate. The product may contain additional non-hazardous or trade secret components.

Mineral Oil (Percent: <45)

Cas #: Proprietary Exposure Limit: ACGIH TLV: 5 mg/m3 (as mist)

ACGIH STEL: 10 mg/m3 (as mist) OSHA PEL: 5 mg/m3 (as mist)

Synthetic Graphite (Percent: <15)

Cas #: 7782-42-5 Exposure Limit: ACGIH TLV: 2 mg/m3 (respirable dust)

OSHA PEL: 15 mg/m3 (total dust), 5 mg/m3 (respirable dust)

Zinc Oxide (Percent: <15)

Cas #: 1314-13-2 Exposure Limit: ACGIH TLV: 10 mg/m3 (total dust), 5 mg/m3 (fume)

ACGIH STEL: 10 mg/m3 (fume)

OSHA PEL: 15 mg/m3 (total dust), 5 mg/m3 (respirable dust)

Carcinogenic Components: This product contains no carcinogens.

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SECTION 3 – HAZARDOUS IDENTIFICATION

POTENTIAL HEALTH EFFECTS and SYMPTOMS from SHORT / ACUTE EXPOSURE:

EYE EXPOSURE

This product is not expected to cause eye irritation under normal conditions of use. Symptoms of slight eye irritation may result when direct contact occurs, or when exposed to high mist levels in poorly ventilated areas.

SKIN EXPOSURE

Short-term skin exposure is not expected to cause skin irritation. Prolonged or repeated direct exposure to the skin may result in symptoms of irritation and redness. In severe cases, prolonged or repeated contact may result in dermatitis accompanied by symptoms of irritation, itching, dryness, cracking and / or inflammation.

INHALATION

This product has low volatility and so is not expected to cause respiratory tract irritation during normal conditions of use. Exposure to high mist levels in poorly ventilated areas may cause upper respiratory tract irritation and difficulty breathing.

INGESTION

Ingestion may cause slight stomach irritation and discomfort.

POTENTIAL CHRONIC HEALTH EFFECTS

Graphite, when suspended in liquid, is not expected to pose an inhalation hazard. Prolonged inhalation of graphite dust in high levels, however, may cause adverse effects, including pneumoconiosis. No further data known.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Graphite, when suspended in liquid, is not expected to aggravate any existing medical conditions. Preexisting pulmonary disorders such as emphysema, however, may possibly be aggravated by prolonged exposure to high graphite dust concentrations. No further data known

CARCINOGENICITY

This product is not listed as a known or suspected carcinogen by IARC, OSHA, or the NTP.

SECTION 4 – FIRST AID MEASURES

EYE CONTACT

Upon direct eye contact, hold eyelids open flush with a steady, gentle stream of water for at least 15 minutes. If irritation is due to exposure to mist or vapors, remove the individual to fresh air. If irritation persists, flush the eyes with clean water until the irritation subsides. If symptoms persist, contact physician.

SKIN CONTACT

Remove product from the skin by washing with mild soap and water. Contaminated clothing should be removed to prevent prolonged exposure. If symptoms of exposure persist, contact physician.

INHALATION

Inhalation is not an expected route of exposure. If respiratory irritation or distress occurs remove the employee to fresh air. Contact a physician or other medical professional if irritation or distress persists.

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INGESTION

If small amounts are ingested, first aid measures are not likely to be necessary. If larger amounts are ingested or if symptoms of ingestion occur, dilute stomach contents with two glasses of water or milk. (NOTE: DO NOT give anything by mouth to an unconscious person). Do not induce vomiting without medical supervision. If vomiting occurs spontaneously keep airway clear. If symptoms of ingestion persist, seek medical attention.

NOTE TO PHYSICIAN

No further data known

<u>SECTION 5 – FIRE FIGHTING MEASURES</u>

FIRE AND EXPLOSION PROPERTIES

Flash Point: 309.0 °F COC Flammability Limits: LEL N/A UFL N/A

EXTINGUISHING MEDIA

In accordance with NFPA guidance, dry chemical, foam, or CO2 fire extinguishers are all acceptable. Note that while water fog extinguishers are also acceptable, do NOT apply a direct stream of water onto burning product because it may cause spreading and increase fire intensity.

UNUSUAL FIRE & EXPLOSION HAZARDS

No further data known.

FIRE-FIGHTING PROCEDURES AND EQUIPMENT

Emergency responders in the danger areas should wear bunker gear and self-contained breathing apparatus for fires beyond the incipient stage. See section 8 of the MSDS for other PPE to be worn as conditions warrant.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

CLEAN-UP MEASURES:

Important: As with any spill or leak, ensure before responding that you are familiar with the potential hazards and recommendations of the MSDS. Appropriate personal protective equipment must be worn. See Section 8 of this MSDS for PPE recommendations.

If possible, safely contain the spill with dikes or other spill response equipment appropriate for petroleum or organic material releases. Take measures to prevent spreading of product. Note that while product will ignite, it will not readily burn. However, as a precaution eliminate ignition sources. Prevent from entering sewers or waterways. Large volumes may be transferred to an appropriate container for proper disposal. Small volumes or residues may be soaked up with absorbents. Spill response materials should be collected for proper disposal.

SECTION 7 – HANDLING AND STORAGE

HANDLING

As with any industrial chemical, handle the product in a manner that minimizes exposure to practicable levels. Prior to handling, consult Section 8 of this MSDS to evaluate personal protective equipment needs. Open containers slowly to relieve any pressure. Follow all other standard industrial hygiene practices.

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Empty containers may contain product residue. All safety precautions taken when handling this product should also be taken when handling empty drums and containers. Keep containers closed when not in use. Product residue in empty containers is combustible but will not readily burn. NOTE however, that excessive heating or cutting of empty containers may create an ignition source sufficient to start a fire and in extreme cases, cause an explosion.

STORAGE

Protect product quality by storing indoors and away from extreme temperatures. Close all containers when not in use.

SPECIAL COMMENTS

No further data known.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

Selection of personal protective equipment should be based upon the anticipated exposure and made in accordance with OSHA's Personal Protective Equipment Standard found in 29 CFR 1910 Subpart I. The following information may be used to assist in PPE selection.

EYE PROTECTION

Wear eye protection appropriate to prevent eye exposure. Where splashing is not likely, chemical safety glasses with side shields are recommended. Where splashing may occur, chemical goggles or full-face shield is recommended.

SKIN PROTECTION

Gloves are not normally needed during normal conditions of use. If health effects are experienced, oil or chemical resistant gloves such as butyl or nitrile are recommended. Where splashing or soaking is likely, wear oil or chemical resistant clothing to prevent exposure.

RESPIRATORY PROTECTION

A respirator may be worn to reduce exposure to vapors, dust, or mist. Select a NIOSH / MSHA approved respirator appropriate for the type and physical character of the airborne material. A self-contained breathing apparatus is recommended in all situations where airborne contaminant concentration has not been confirmed to be below safe levels. Respirator use should comply with the OSHA Respirator Protection Standard found in 29 CFR 1910.134.

ENGINEERING CONTROLS

Normal general ventilation is expected to be adequate. It is recommended that ventilation be designed in all instances to maintain airborne concentrations at lower practicable levels. Ventilation should at a minimum, prevent airborne concentrations from exceeding any exposure limits listed in Section 2 of this MSDS.

The user may wish to refer to 29 CFR 1910.1000 (d) (2) and ACGIH "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices" (Appendix C) for the determination of exposure limits of mixtures. An industrial hygienist or similar professional may be consulted to confirm that the calculated exposure limits apply.

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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Appearance: Bronze

Odor: Mild Petroleum
Physical State: Semi-Solid Grease

Specific Gravity: 1.020 Water Solubility: Insoluble

SECTION 10 – STABILITY AND REACTIVITY

INCOMPATIBILITIES

This product is incompatible with strong oxidizing agents.

DECOMPOSITION PRODUCTS MAY INCLUDE

Thermal decomposition products are dependent on combustion conditions. A complex mixture of airborne solid, liquid, particulates and gasses may evolve when the material burns. Combustion byproducts may include:

- Oxides of copper
- Oxides of zinc
- Oxides of carbon
- Incompletely burned hydrocarbons as fumes and smoke.

CONDITIONS TO AVOID

Avoid contact with incompatible materials and exposure to extreme temperatures.

POLYMERIZATION

This product is not expected to polymerize.

STABILITY

This product is stable.

SECTION 11 – TOXICOLOGICAL INFORMATION

EYE EFFECTS

No further toxicological data known.

SKIN EFFECTS

No further toxicological data known.

ORAL EFFECTS

No further toxicological data known.

INHALATION EFFECTS

No further toxicological data known.

OTHER

No further toxicological data known.

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SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

This product has not been evaluated for ecotoxicity. As with any industrial chemical, exposure to the environment should be prevented and minimized wherever possible.

ENVIRONMENTAL FATE

The degree of biodegradability and persistence of this product has not been determined.

SECTION 13 – DISPOSAL CONSIDERATION

WASTE DISPOSAL

Ensure that collection, transport, treatment, and disposal of waste product, containers and rinsate comply with all applicable laws and regulations. Note that use, mixture, processing, or contamination of the product may cause the material to be classified as a hazardous waste. It is the responsibility of the product user or owner to determine at the time of disposal, whether the product is regulated as a hazardous waste.

SECTION 14 – TRANSPORT INFORMATION

DOT HAZARDOUS MATERIAL INFORMATION

Not otherwise DOT regulated.

SECTION 15 – REGULATORY INFORMATION

FEDERAL REGULATIONS

SARA 313: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and reauthorization Act of 1986 and 40 CFR Part 372:

Copper Compounds CAS # N/A PCT by WT: < 25 **Zinc Oxide** CAS # N/A PCT by WT: < 15

CLEAN WATER ACT / OIL POLLUTION ACT

This product contains mineral oil and is subject to regulations by Section 311 of the Clean Water Act and the Oil Pollution Act. Releases of the product into or leading to surface waters must be reported to the National Response Center at 1-800-424-8802.

CERCLA REPORTABLE QUANTITY:

Any components listed below have been assigned a reportable quantity (RQ) by the Federal EPA. Releases of the product into the environment that exceed the RQ for a particular component must be reported to the National Response Center at 1-800-424-8802.

COMPONENT	RQ
(NONE FOUND IN THIS PRODUCT)	

TOXIC SUBSTANCES CONTROL ACT

The components of this product are listed on the TSCA Inventory.

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OZONE DEPLETING SUBSTANCES

The product contains no ozone depleting substances as defined by the Clean Air Act.

HAZARDOUS AIR POLLUTANTS

The Federal EPA defines any components listed below as hazardous air pollutants.

STATE REGULATIONS

This product contains mineral oil, and as used, may be regulated by state used oil regulations. Check with the appropriate state agency to determine whether such a regulation exists.

No further data known.

SECTION 16 – OTHER INFORMATION

LAST REVISION DATE: March 25, 2010

NOTICE OF DISCLAIMER

Please note that all information provided in these MSDS sheets have been carefully edited by Davley Darmex Lubricants and are considered to be accurate at the time of issue. However, no responsibility for possible errors or omissions can be assumed and the company reserves the right to change without notice. Davley Darmex assumes no legal responsibility or warranty either expressly or by implication based on this data. Please also note that the chemical identity of some or all of the ingredients may be withheld as confidential business information as permitted by 29 CFR 1910.1200 and other relevant legislation. Duplication in whole or in part of this information without written consent is prohibited. © Davley Darmex Lubricants.

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