

SAFETY DATA SHEET

1. Identification

| Product identifier | Nickel Anti-Seize Lubricating Compound |
|-------------------------------|--|
| Other means of identification | |
| Product code | SL35911, SL35913 |
| Recommended use | Anti-seize lubricant |
| Recommended restrictions | None known. |
| Manufacturer/Importer/Supplie | r/Distributor information |
| Manufactured or sold by: | |
| Company name | CRC Industries, Inc. |
| Address | 885 Louis Dr. |
| | Warminster, PA 18974 US |
| Telephone | |
| General Information | 215-674-4300 |
| Technical | 800-521-3168 |
| Assistance | |
| Customer Service | 800-272-4620 |
| 24-Hour Emergency | 800-424-9300 (US) |
| (CHEMTREC) | 703-527-3887 (International) |
| Website | www.crcindustries.com |

2. Hazard(s) identification

| Physical hazards | Not classified. | |
|---|--|---|
| Health hazards | Sensitization, skin | Category 1 |
| | Carcinogenicity | Category 2 |
| | Specific target organ toxicity, repeated exposure | Category 1 |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard | Category 2 |
| | Hazardous to the aquatic environment, long-term hazard | Category 3 |
| OSHA defined hazards | Not classified. | |
| Label elements | | |
| | | |
| | | |
| Signal word | Danger | |
| Signal word Hazard statement | May cause an allergic skin reaction. Suspecte (respiratory tract) through prolonged or repeat | d of causing cancer. Causes damage to organs ed exposure by inhalation. Toxic to aquatic life. |
| Hazard statement | May cause an allergic skin reaction. Suspecte (respiratory tract) through prolonged or repeat Harmful to aquatic life with long lasting effects | ed exposure by inhalation. Toxic to aquatic life. |
| • | May cause an allergic skin reaction. Suspecte (respiratory tract) through prolonged or repeat Harmful to aquatic life with long lasting effects Obtain special instructions before use. Do not | handle until all safety precautions have been read thoroughly after handling. Do not eat, drink or work clothing must not be allowed out of the |
| Hazard statement Precautionary statement | May cause an allergic skin reaction. Suspecte (respiratory tract) through prolonged or repeat Harmful to aquatic life with long lasting effects Obtain special instructions before use. Do not and understood. Do not breathe vapors. Wash smoke when using this product. Contaminated workplace. Wear protective gloves/protective of release to the environment. If on skin: Wash with plenty of water. If skin irr | handle until all safety precautions have been read thoroughly after handling. Do not eat, drink or work clothing must not be allowed out of the |
| Hazard statement Precautionary statement Prevention | May cause an allergic skin reaction. Suspecte (respiratory tract) through prolonged or repeat Harmful to aquatic life with long lasting effects Obtain special instructions before use. Do not and understood. Do not breathe vapors. Wash smoke when using this product. Contaminated workplace. Wear protective gloves/protective of release to the environment. If on skin: Wash with plenty of water. If skin irr medical advice/attention if you feel unwell. Wa | handle until all safety precautions have been read handle until all safety precautions have been read thoroughly after handling. Do not eat, drink or d work clothing must not be allowed out of the clothing/eye protection/face protection. Avoid itation or rash occurs: Get medical attention. Get |

Supplemental information

82.41% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|---|--------------------------|------------|---------|
| Distillates (petroleum), hydrotreated heavy naphthenic | | 64742-52-5 | 50 - 60 |
| Graphite | | 7782-42-5 | 10 - 20 |
| Nickel | | 7440-02-0 | 10 - 20 |
| Residual oils (petroleum), hydrotreated | | 64742-57-0 | 10 - 20 |

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

| 4. First-aid measures | |
|--|--|
| Inhalation | If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist. |
| Skin contact | Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. |
| Eye contact | Immediately flush eyes with plenty of water for at least 15 minutes. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| Ingestion | Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately. |
| Most important symptoms/effects, acute and delayed | May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. |
| General information | IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse. |

5. Fire-fighting measures

| Suitable extinguishing media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
|--|---|
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. Carbon dioxide (CO2). |
| Specific hazards arising from the chemical | During fire, gases hazardous to health may be formed. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Fire-fighting equipment/instructions | Move containers from fire area if you can do so without risk. |
| General fire hazards | No unusual fire or explosion hazards noted. |

6. Accidental release measures

| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. | | |
|---|--|--|--|
| Methods and materials for containment and cleaning up | Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS. | | |
| Environmental precautions | Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases. | | |

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Provide adequate ventilation. Do not breathe vapor. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Avoid release to the environment. For product usage instructions, please see the product label.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components | Туре | Value | Form |
|--|-------------------------------------|---|-------------------------|
| Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5) | PEL | 5 mg/m3 | Mist. |
| | | 2000 mg/m3 | |
| | | 500 ppm | |
| Graphite (CAS 7782-42-5) | PEL | 5 mg/m3 | Respirable fraction. |
| | | 15 mg/m3 | Total dust. |
| Nickel (CAS 7440-02-0) | PEL | 1 mg/m3 | • • • |
| Residual oils (petroleum), hydrotreated (CAS 64742-57-0) | PEL | 5 mg/m3 | Mist. |
| US. OSHA Table Z-3 (29 CF | R 1910.1000) | | |
| Components | Туре | Value | |
| Graphite (CAS 7782-42-5) | TWA | 15 mppcf | |
| US. ACGIH Threshold Limit | Values | | |
| Components | Туре | Value | Form |
| Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5) | TWA | 5 mg/m3 | Inhalable fraction. |
| Graphite (CAS 7782-42-5) | TWA | 2 mg/m3 | Respirable fraction. |
| Nickel (CAS 7440-02-0) | TWA | 1.5 mg/m3 | Inhalable fraction. |
| Residual oils (petroleum), hydrotreated (CAS 64742-57-0) | TWA | 5 mg/m3 | Inhalable fraction. |
| US. NIOSH: Pocket Guide t | o Chemical Hazards | | |
| Components | Туре | Value | Form |
| Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5) | Ceiling | 1800 mg/m3 | |
| | STEL | 10 mg/m3 | Mist. |
| | TWA | 5 mg/m3 | Mist. |
| Graphite (CAS 7782-42-5) | TWA | 2.5 mg/m3 | Respirable. |
| Nickel (CAS 7440-02-0) | TWA | 0.015 mg/m3 | |
| Residual oils (petroleum), hydrotreated (CAS 64742-57-0) | STEL | 10 mg/m3 | Mist. |
| / | TWA | 5 mg/m3 | Mist. |
| logical limit values | No biological exposure limits noted | for the ingredient(s). | |
| osure guidelines | Occupational Exposure Limits are n | | al form of the product. |
| propriate engineering ntrols Good general ventilation (typically 10 air changes per hour) should be used. Ventilatio should be matched to conditions. If applicable, use process enclosures, local exhaust or other engineering controls to maintain airborne levels below recommended exposure exposure limits have not been established, maintain airborne levels to an acceptable | | res, local exhaust ventilatio mmended exposure limits. I | |

Individual protection measures, such as personal protective equipment Eye/face protection Wear safety glasses with side shields (or goggles). Skin protection Hand protection Wear protective gloves such as: Nitrile. Polyvinyl chloride (PVC). Other Wear appropriate chemical resistant clothing. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a **Respiratory protection** NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels. Thermal hazards Wear appropriate thermal protective clothing, when necessary. **General hygiene** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective considerations equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

| Appearance | | | |
|--|--|--|--|
| Physical state | Solid. | | |
| Form | Semi-solid paste. | | |
| Color | Silver. | | |
| Odor | Petroleum. | | |
| Odor threshold | Not available. | | |
| | | | |
| рН | | | |
| Melting point/freezing point | > 449.6 °F (> 232 °C) | | |
| Initial boiling point and boiling range | > 500 °F (> 260 °C) | | |
| Flash point | > 449.6 °F (> 232 °C) Cleveland Open Cup | | |
| Evaporation rate | Very slow. | | |
| Flammability (solid, gas) | Not available. | | |
| Upper/lower flammability or explosive limits | | | |
| Flammability limit - lower (%) | Not available. | | |
| Flammability limit - upper (%) | Not available. | | |
| Vapor pressure | < 0.1 mm Hg | | |
| Vapor density | > 5 (air = 1) | | |
| Relative density | 1.24 | | |
| Solubility (water) | Insoluble. | | |
| Partition coefficient (n-octanol/water) | Not available. | | |
| Auto-ignition temperature | > 500 °F (> 260 °C) | | |
| Decomposition temperature | Not available. | | |
| Viscosity (kinematic) | Not available. | | |
| Percent volatile | 15.2 % estimated | | |

10. Stability and reactivity

| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
|---------------------------------------|---|
| Chemical stability | Material is stable under normal conditions. |
| Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | Contact with incompatible materials. |
| Incompatible materials | Strong acids. Chlorine. Strong oxidizing agents. |
| Hazardous decomposition products | Carbon oxides. Hydrocarbon fumes and smoke. Metal oxides. |

11. Toxicological information

Information on likely routes of exposure Prolonged inhalation may be harmful. Inhalation May cause an allergic skin reaction. Skin contact Eve contact Direct contact with eyes may cause temporary irritation. Expected to be a low ingestion hazard. Ingestion Symptoms related to the May cause an allergic skin reaction. Dermatitis. Rash. physical, chemical and toxicological characteristics Information on toxicological effects May cause an allergic skin reaction. Acute toxicity Product **Species Test Results** Nickel Anti-Seize Lubricating Compound **Acute** Dermal LD50 Rabbit 3841 mg/kg estimated Oral LD50 Rat 3181 mg/kg estimated * Estimates for product may be based on additional component data not shown. Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Serious eye damage/eye Direct contact with eyes may cause temporary irritation. irritation **Respiratory sensitization** Not a respiratory sensitizer. Skin sensitization May cause an allergic skin reaction. No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity mutagenic or genotoxic. Carcinogenicity Suspected of causing cancer. IARC Monographs. Overall Evaluation of Carcinogenicity Nickel (CAS 7440-02-0) 2B Possibly carcinogenic to humans. US. National Toxicology Program (NTP) Report on Carcinogens Nickel (CAS 7440-02-0) Reasonably Anticipated to be a Human Carcinogen. **Reproductive toxicity** This product is not expected to cause reproductive or developmental effects. Not classified. Specific target organ toxicity -

| single exposure | |
|--|---|
| Specific target organ toxicity - repeated exposure | Causes damage to organs through prolonged or repeated exposure. |
| Aspiration hazard | Not an aspiration hazard. |
| Chronic effects | Causes damage to organs through prolonged or repeated exposure. Prolonged exposure may cause chronic effects. |

12. Ecological information

| Ecotoxicity | Toxic to a | Toxic to aquatic life. Harmful to aquatic life with long lasting effects. | | |
|------------------------|------------------|---|-----------------------------------|--|
| Product | | Species | Test Results | |
| Nickel Anti-Seize Lubr | icating Compound | | | |
| Aquatic | | | | |
| Fish | LC50 | Fish | 636.497 mg/l, 96 hours estimated | |
| Acute | | | | |
| Crustacea | EC50 | Daphnia | 568.4208 mg/l, 48 hours estimated | |

| Components | | Species | Test Results |
|-------------------------------|----------------|---|-----------------------|
| Distillates (petroleum), hydr | otreated heavy | naphthenic (CAS 64742-52-5) | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 1000 mg/l, 48 hours |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 5000 mg/l, 96 hours |
| Graphite (CAS 7782-42-5) | | | |
| Aquatic | | | |
| Acute | | | |
| Fish | LC50 | Fish | > 1800 mg/l, 96 hours |
| Nickel (CAS 7440-02-0) | | | |
| Aquatic | | | |
| Fish | LC50 | Pumpkinseed (Lepomis gibbosus) | 8 mg/l, 96 hours |
| Acute | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | > 100 mg/l, 48 hours |
| * Estimates for product may | be based on a | dditional component data not shown. | |
| rsistence and degradability | No data is a | available on the degradability of this produ | ct. |
| accumulative potential | No data ava | ailable. | |
| bility in soil | No data ava | ailable. | |
| ner adverse effects | | dverse environmental effects (e.g. ozone de ndocrine disruption, global warming potent | |
| 3. Disposal considerati | ons | | |

| Disposal of waste from residues / unused products | This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable regulations. | |
|--|---|--|
| Hazardous waste code | Not regulated. | |
| Contaminated packaging | ninated packaging Since emptied containers may retain product residue, follow label warnings even after con emptied. Empty containers should be taken to an approved waste handling site for recyclir disposal. | |

14. Transport information

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

| US federal regulations | This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. |
|-------------------------|---|
| TSCA Section 12(b) Expe | ort Notification (40 CFR 707, Subpt. D) |
| Not regulated. | |
| US. OSHA Specifically R | egulated Substances (29 CFR 1910.1001-1050) |
| Not listed. | |
| SARA 304 Emergency re | lease notification |
| Not regulated. | |
| US EPCRA (SARA Title I | II) Section 313 - Toxic Chemical: Listed substance |
| Nickel (CAS 7440-02- | 0) |
| CERCLA Hazardous Sub | stance List (40 CFR 302.4) |
| Nickel (CAS 7440-02- | 0) Listed. |

CERCLA Hazardous Substances: Reportable quantity

Nickel (CAS 7440-02-0)

100 LBS

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Nickel (CAS 7440-02-0)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

 Safe Drinking Water Act
 Not regulated.

 (SDWA)
 Not regulated.

Administration (FDA)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

| Section 311/312 Hazard categories | Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No | |
|---|--|--|
| SARA 302 Extremely hazardous substance | No | |

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5) Nickel (CAS 7440-02-0)

Residual oils (petroleum), hydrotreated (CAS 64742-57-0)

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100) Not listed.

US. New Jersey Worker and Community Right-to-Know Act

Graphite (CAS 7782-42-5) Nickel (CAS 7440-02-0) Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5) Residual oils (petroleum), hydrotreated (CAS 64742-57-0)

US. Massachusetts RTK - Substance List

Graphite (CAS 7782-42-5) Nickel (CAS 7440-02-0) Residual oils (petroleum), hydrotreated (CAS 64742-57-0)

US. Pennsylvania Worker and Community Right-to-Know Law

Nickel (CAS 7440-02-0) Graphite (CAS 7782-42-5) Residual oils (petroleum), hydrotreated (CAS 64742-57-0)

US. Rhode Island RTK

Nickel (CAS 7440-02-0)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

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Nickel (CAS 7440-02-0) Listed: October 1, 1989
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Volatile organic compounds (VOC) regulations

| EPA | |
|--|---|
| VOC content (40 CFR 51.100(s)) | 0 % |
| Consumer products (40 CFR 59, Subpt. C) | Not regulated |
| State | |
| Consumer products | This product is regulated as an Anti-seize Lubricant (non-aerosol). This product is compliant for use in all 50 states. |
| VOC content (CA) | 0 % |
| VOC content (OTC) | 0 % |

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | No |
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | Yes |
| China | Inventory of Existing Chemical Substances in China (IECSC) | No |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | No |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

| Issue date | 07-21-2015 |
|---------------------|---|
| Prepared by | Allison Cho |
| Version # | 01 |
| Further information | Not available. |
| HMIS® ratings | Health: 2* Flammability: 1 Physical hazard: 0 Personal protection: B |
| NFPA ratings | Health: 2 Flammability: 1 Instability: 0 |
| NFPA ratings | |

Disclaimer

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