MATERIAL SAFETY DATA SHEET   MSDS
Nano-Oil ™ by StClaire   -   Industrial Lubricant Part# NLNA-5-10-85

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Nano-Oil by StClaire -- Armament Lubricant Part# NLNA-5-10-85 weight
Product use: Industrial and Armament Lubrication

Company Information:               Phone Number : 707 235-4029
StClaire
P. O. BOX 750850
Petaluma, CA 94975-0850  USA

Transportation NFPA Code: Health: 1    Fire: 1  Reactivity: 0

2. COMPONENT INFORMATION

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>CAS #</th>
<th>HAZARDOUS IN BLEND</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Highly Solvent Refined Paraffinic Petroleum Oil</td>
<td>64741-88-4</td>
<td>No</td>
</tr>
<tr>
<td>- Extremely Hydrotreated Heavy Naphthenic Mineral Oil</td>
<td>64742-52-5</td>
<td>No</td>
</tr>
<tr>
<td>- Detergent, Inhibitor &amp; Dispersant System Highly refined Mineral base Stock distillates</td>
<td>Trade Secret Mixture</td>
<td>No</td>
</tr>
<tr>
<td>- Proprietary Ingredients:</td>
<td>Trade Secret Mixture</td>
<td>No</td>
</tr>
</tbody>
</table>

-This material is not known to contain any chemical listed or suspected as a carcinogen by OSHA, IARC, or the National Toxicology Program (NTP) at a concentration greater than 0.1%.

3. FIRE COMBUSTION EXPLOSION

Flammable Properties
Flash Point:  > 473 Degree Fahrenheit (245 Degree Celsius) ASTMD-93 Liquid

Flammable Limits in Air
Upper Percent: No Data Available - Not Applicable
Lower Percent: No Data Available - Not Applicable

Explosion Information: Not Reactant to Mechanical Impacts or Static Discharge Exposure
Extinguishing Media: Use Dry Chemical, Foam, Carbon Dioxide or Water Mist
Fire Fighting Measures & Equipment: SCBA Self Contained Breathing Apparatus Full Face

Unusual Fire & Explosion Conditions: Dense Smoke may evolve while burning. CO (Carbon Monoxide) CO2 (Carbon Dioxide) & other Oxides may be generated as by-products of Combustion.
4. HEALTH HAZARD IDENTIFICATION

TOXICOLOGICAL INFORMATION

**Primary Eye Irritation:** May cause eye irritation, based on component data and or similar materials.

**Primary Skin Irritation:** May cause skin irritation, based on component data and or similar materials.

**Dermal Toxicity:** based on component data and or similar materials, the LD50 in Rabbits is > 2 Grams per Kilogram

**Subacute Dermal Toxicity:** No data available to indicate product and or components may be a toxic dermal hazard.

**Dermal Sensitization:** No data available to indicate product or components may be a skin sensitizer.

**Inhalation Toxicity:** No data available to indicate product and or components may be toxic inhalation hazard.

**Inhalation Sensitization:** No data available to indicate product and or components may be a respiratory sensitizer.

**Oral Toxicity:** based on component data and or similar materials, higher than 5 Grams per Kilogram in Rats.

**Mutagenicity:** No data available to indicate product and or any components present at greater than 0.1% are genotoxic or mutagenic.

**Carcinogenicity:** No data available to indicate product and or any components present at greater than 0.1% may present a carcinogenic hazard.

**Reproductive and Developmental Toxicity:** No data available to indicate product and or any components present at greater than 0.10% may cause reproductive toxicity.

**Teratogenicity:** No data available to indicate product and or any components present at greater than 0.1% may cause birth defects.

**Immunotoxicity:** No data available to indicate product and or any components present at greater than 0.1% may be an Immunotoxic hazard.

**Neurotoxicity:** No data available to indicate product and or any components present at greater than 0.1% may be a Neurotoxic hazard.

**Carcinogenicity:** The International Agency for Research on Cancer (IARC) has concluded that there is inadequate data to evaluate the carcinogenicity to experimental animals of this class of product.

IARC has determined this class of products belongs to Group 3- "not classifiable as to its carcinogenicity to humans".

**Other:** No other Health hazard known.

**Exposure Limits:** Product contains mineral oil, under conditions that can generate mist, observe:

- ACGIH STEL of 10 milligrams (mg) per cubic meter (1 m3).
- OSHA PEL of 5 milligrams (mg) per cubic meter (1 m3).

5. FIRST AID INFORMATION AND PROCEDURES

**Eye Contact:** Immediately flush with large amount of water and keep flushing until irritation subsides. Seek medical attention should eye irritation develops or persists.

**Skin Contact:** No treatment necessary under normal circumstances. Wash with soap and water.

Remove and launder contaminated clothing before reusing.

If redness or irritation occurs and persists, seek medical attention.

**Ingestion:** No treatment necessary under normal circumstances. Do not induce vomiting.

If conscious, administer a glass of water.

If victim shows signs of lung aspiration, seek immediate medical assistance.

**Inhalation:** This material has a low vapor pressure at ambient conditions and is not expected to present an inhalation exposure. Move to a fresh air area.

**Note to Physician:** Treat symptomatically.
6. EXPOSURE CONTROL AND PERSONAL PROTECTION INFORMATION

Exposure Limits Guidelines: This Material does not contain any components listed with OSHA or ACGIH exposure limits tables.

Personal Protective Equipment:

Eye and Face Protection: Eye protection is not required under normal condition of use. If handled in a manner where splashing could occur, wear plastic splash proof safety goggles or face shield.

Skin Protection: No skin protection is required for single or brief duration exposure. If prolonged or repeated exposure: use impervious attires on the part of the handler's body subject to exposure such as: Gloves (Nitrile or Neoprene rubber) Aprons etc. Launder contaminated clothes. Do not reuses contaminated leather clothing and articles such as shoes and gloves that cannot be decontaminated, dispose of such properly.

Respiratory Protection: Respiratory protection is not required under normal use conditions. If mist or vapor is generated by heating or misting, use an organic vapor respirator with a dust and mist filters. If using Respirators they must comply with NIOSH certification. Do not use Oxygen in a Hydrocarbon environment.

Ventilation and Engineering Controls: Should mist or vapor be generated by heating, apply good engineering practices in ventilation to provide an atmosphere below the concentration of the specific exposure and flammable limits.

Personal Hygiene: Food and Beverage consumption should be avoided in work area where hydrocarbons are present. Always wash hands and face with water and soap before eating, drinking and smoking.

Other: The OSHA Permissible Exposure Limit (PEL) and ACGIH Threshold Limit Value (TLV) for oil mist is 5 mg/m³. Chronic exposures below 5 mg/m³ are without significant health risks. The ACGIH Short Term Exposure Limit (STEL) for oil mist is 10 mg/m³.

7. PHYSICAL AND CHEMICAL PROPERTIES INFORMATION

Appearance: Light amber liquid  Specific Gravity: 0.94 to 0.96 @ 60 degrees Fahrenheit (15.6 degrees Celsius)
Odor: Mild Hydrocarbon  Odor Threshold: No data available or determined
Physical state: Liquid  Water Solubility: Negligible to Insoluble in water.
Vapor Pressure: No data available  Percent Volatile by Volume: No data available or determined
Vapor Density (air = 1): No data available or determined

8. REACTIVITY AND STABILITY INFORMATION

Chemical Stability: Stable

Conditions to Avoid: Open flames and high heat.

Incompatible Materials to avoid: May react to strong oxidizing agents.

Polymerization: Cannot occur

10. ACCIDENTAL SPILL OR LEAK AND DISPOSAL PROCEDURES

Personal Safeguards: Consult health effect in Section 4 and 5.

Regulatory Notifications: Notify the proper authority of the spill.

Containment and Clean up: Wear proper protection (chemical splash goggles, rubber boots and gloves).
Ventilate the area and prevent spill from entering sewers, water courses/waterways.
Absorb free liquid for disposal or recycling with inert materials such as clay or sand, vacuum pumps, shovels, buckets.

Disposal: This material is believed to be NON-HAZARDOUS. Dispose according to and in compliance with applicable Federal, State, Provincial and Local Laws and Regulations.

Caution! If regulated solvents are used to clean up spilled materials, the ensuing waste mixture may be regulated.
The Department of Transportation (DOT) regulations and guidelines may apply to transport the spilled materials.

11. SPECIAL PRECAUTIONS HANDLING AND STORAGE

Handling: Fire Extinguishers should be readily made available.
Consult OSHA 1910.106 and NFPA 30 (Flammable and Combustible Liquids)

Storing: Store in closed containers in well ventilated area away from heat, sparks, open flames and oxidizing agents.
Do not transfer to unmarked containers.

Empty Containers: Plastic should be completely drain and may still retain material residue.

Special Precautions: Do not take internally, avoid contact with mouth, skin, eyes and clothing.
Wash thoroughly after handling the material and before consuming food, beverages or smoking.
Remove contaminated clothing and launder before reuse.
Do not reuse contaminated leather articles such as shoes and dispose of them properly.

12. TRANSPORTATION AND LABELING INFORMATION

U.S. Department of Transportation (DOT)
Proper Shipping Name: Consumer commodity
Highway or Rail (Non Bulk): Not regulated
Highway or Rail (Bulk): Not regulated
DOT CERCLA Hazardous Substances: None known

International Information:
Vessel: IMDG Not Regulated
Air: ICAO Not Regulated

13. OTHER REGULATORY INFORMATION

U.S. TSCA Inventory: All components of this material are on the U.S. TSCA inventory.

EEC EINECS: All Components are in compliance with the EEC sixth Amendment Directive 79/831

Japan MITI: Not Determined

SARA Section 313 Status: This product is not known to contain any SARA, Title III Section 313 Reportable Chemicals at or greater than 1.0% or any carcinogenic chemical greater than 0.1%.

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