

Product Name: **Cold-Cranking Simulator Standards – Mineral Base Oil**

Revision Date: *March 6, 2008*



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MSDS ref CII08-013

## MATERIAL SAFETY DATA SHEET

### SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

#### PRODUCT

**Product name:** **Cold-Cranking Simulator Standards – Mineral Base Oil**

**Alternate description/ brand:** CL120, CL140, CL160, CL190, CL220, CL250, CL280, CL320, CL380, CL480, CL600, CL740

**Product description:** Highly refined mineral oil

**Product code:** 9727-N08, 9727-N10, 9727-N12, 9727-N14, 9727-N18, 9727-N22, 9727-N26, 9727-N30, 9727-N32, 9727-N34, 9727-N36, 9727-N38

**Intended use:** Instrumentation/ calibration standards

#### COMPANY IDENTIFICATION

**Supplier:** **Cannon Instrument Company**  
**2139 High Tech Road**  
**State College, Pennsylvania 16803**

**Product Technical Information:** (814) 353-8000

**Product MSDS Information:** (814) 353-8000

#### EMERGENCY TELEPHONE NUMBER:

**24-Hour Transportation Emergency:** (800) 255-3924 Domestic CHEM-TEL Inc.

**24-Hour Health Emergency:** +1 (813) 248-0585 Overseas CHEM-TEL Inc. (please call collect)

### SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

- **OSHA Hazardous Substance(s) or Complex Substance(s)**

None present. This is not a hazardous substance as defined in the OSHA Hazard Communication Standard

### SECTION 3 HAZARD IDENTIFICATION

This product is a mixture that has not been tested in laboratory animals. The following is based on characterizations of components as provided by suppliers

#### EFFECTS OF OVEREXPOSURE:

##### Acute effects

**Eye:** Non-toxic, not classified as irritating. Direct contact may cause temporary redness and discomfort.

**Skin:** No significant irritation expected from a single short-term exposure

**Inhalation:** No significant effects expected from a single short-term exposure. Inhalation exposures are not expected under recommended uses/ conditions

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**Oral:** Low ingestion hazard in normal use. If ingested, do not induce vomiting.

**Prolonged/ repeated exposure effects**

**Skin:** Not classified as hazardous

**Inhalation:** Not classified as hazardous

**Oral:** Not classified as hazardous

Repeated and/or prolonged exposure may cause irritation to the skin, eyes or respiratory tract. For mineral base oils: Base oils in this product are severely solvent refined and/or severely hydrotreated. Chronic mouse skin painting studies of severely treated oils show no evidence of carcinogenic effects.

**Signs and symptoms of overexposure:**

Irritation and/ or redness of eyes and skin

**Medical conditions aggravated by exposure**

None identified

**NFPA HAZARD ID:** Health: 0 Flammability: 1 Reactivity: 0  
(National Fire Protection Association)

NOTE: This material should not be used for any other purpose than the intended use in Section 1

**SECTION 4 FIRST AID MEASURES**

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| <b>INHALATION</b>   | Not expected to be a problem since high temperature or high mechanical shear are required to generate airborne exposure. However, if respiratory irritation, dizziness, nausea, or unconsciousness occurs due to excessive vapor or mist exposure, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or mouth-to-mouth resuscitation . |
| <b>SKIN CONTACT</b> | Wash contact areas with soap and water. Remove and clean oil soaked clothing daily and wash affected area .   |
| <b>EYE CONTACT</b>  | Flush thoroughly with water. If irritation occurs, call a physician.  |
| <b>INGESTION</b>    | Seek medical attention. Do not induce vomiting.   |

**NOTE TO PHYSICIAN:** Ingested material, if aspirated into the lungs, can cause chemical pneumonitis.

**SECTION 5 FIRE-FIGHTING MEASURES**

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## EXTINGUISHING MEDIA

**Appropriate extinguishing media:** Carbon dioxide, foam, dry chemical and water fog. Water can be used to cool fire exposed containers

## FIRE FIGHTING

**Fire fighting instructions:** Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep the exposed containers cool. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

**Unusual fire hazards:** None identified

**Hazardous combustion products:** Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Fumes, smoke, carbon monoxide, sulfur oxides, aldehydes and other decomposition products

## FLAMMABILITY PROPERTIES

**Flash point °C (°F) [method]:** >201 °F/ 94 °C (minimum)

**Flammable limits (approx. Volume % in air) –** not determined

**Autoignition temperature °C (°F):** not determined

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**NOTIFICATION PROCEDURES:** Report spills/releases to appropriate authorities as required.

## CONTAINMENT/ CLEANUP

### **PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:**

**LAND SPILL:** Shut off source taking normal safety precautions. Take measures to minimize the effects on ground water. Recover by pumping or contain spilled material with sand or other suitable absorbent and remove mechanically into containers. If necessary, dispose of adsorbed residues as required by regulations (see Section 13.)

**WATER SPILL:** Confine the spill immediately with booms. Notify relevant authorities. Remove from the surface by skimming or with suitable absorbents

**ENVIRONMENTAL PRECAUTIONS:** Prevent material from entering sewers, water sources or low lying areas; advise the relevant authorities if it has, or if it contaminates soil/vegetation.

## PERSONAL PROTECTIVE EQUIPMENT FOR SPILLS

**Eyes:** Use proper protection – safety glasses as a minimum

**Skin:** Washing at mealtime and end-of-shift is adequate

**Inhalation:** No respiratory protection should be needed

**Precautionary measures:** Avoid eye contact. Use reasonable care

## SECTION 7 HANDLING AND STORAGE

### HANDLING

Avoid prolonged/ repeated skin contact. Use with adequate ventilation

**STORAGE:**

Keep containers closed when not in use. Do not store in open or unlabelled containers. Store away from strong oxidizing agents and combustible materials. Do not store near heat, sparks, flame or strong oxidants.

**SPECIAL PRECAUTIONS**

Prevent small spills and leakages to optimize housekeeping and avoid slip hazard.

**EMPTY CONTAINER WARNING**

Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

**STORAGE**

Use reasonable care and store away from oxidizing materials

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| <b>SECTION 8</b> | <b>EXPOSURE CONTROLS/PERSONAL PROTECTION</b> |
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**EXPOSURE LIMIT VALUES**

When mists/aerosols can occur, the following are recommended:

- 5 mg/m<sup>3</sup> (as oil mist) - ACGIH Threshold Limit Value (TLV)
- 10 mg/m<sup>3</sup> (as oil mist) - ACGIH Short Term Exposure Limit (STEL)
- 5 mg/m<sup>3</sup> (as oil mist) – OSHA Permissible Exposure Limit (PEL)

**ENGINEERING CONTROLS**

General ventilation is recommended. No local exhaust ventilation should be needed

**PERSONAL PROTECTION**

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection:**

No respiratory protection should be needed

**Hand Protection:**

No special protection needed

**Eye Protection:**

Use proper protection – safety glasses as a minimum

**Specific Hygiene Measures:**

Washing at mealtime and end-of-shift is adequate

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| <b>SECTION 9</b> | <b>PHYSICAL AND CHEMICAL PROPERTIES</b> |
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Typical physical and chemical properties are given below. Consult the Cannon Instrument Company as indicated in Section 1 for additional data.

#### GENERAL INFORMATION

**Physical state:** Liquid  
**Form:** Liquid  
**Color:** Light amber color  
**Odor:** Characteristic petroleum odor  
**Odor threshold:** not available

#### IMPORTANT HEALTH, SAFETY AND ENVIRONMENTAL INFORMATION

**Specific Gravity @ 25°C:** <0.91  
**Bulk density g/cc:** not determined  
**Density, kg/m<sup>3</sup> (lbs./gal.):** not determined  
**Flash point °C (°F) [method]:** >201 °F/ 94 °C (minimum)  
**Flammable limits (approx. Volume % in air) -** not determined  
**Ignition temperature (polymers) °C (°F):** not applicable  
**Autoignition temperature °C (°F):** not determined  
**Boiling point/range °C (°F):** not determined  
**Vapor density @ 101 kPa (air =1):** not determined  
**Vapor pressure @ 20°C, kPa (mm Hg):** not determined  
**Evaporation rate (n-butyl acetate =1):** not determined  
**pH:** not applicable  
**Log Pow (n-Octanol/water partition coefficient):** not determined  
**Solubility in water (20 °C):** negligible  
**Viscosity:** see product specification

#### OTHER INFORMATION

**Freezing point °C (°F):** not determined  
**Melting Point °C (°F):** not determined  
**Pour point °C (°F):** not determined  
**Molecular weight:** not available  
**Hygroscopic:** no  
**Coefficient of thermal expansion:** not determined

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| <b>SECTION 10</b> | <b>STABILITY AND REACTIVITY</b> |
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**STABILITY:** Stable

**CONDITIONS TO AVOID:** Extreme heat and high energy sources of ignition.

**MATERIALS TO AVOID:** Strong oxidizing agents/ materials can cause a reaction

**HAZARDOUS DECOMPOSITION PRODUCTS:** Product does not decompose at ambient temperatures.

**HAZARDOUS POLYMERIZATION:** Hazardous polymerization will not occur

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. The information and recommendations contained herein is compiled from suppliers' MSDS and are accurate and reliable to the best of Cannon Instrument Company's knowledge and belief as of the indicated revision date. No representation, warranty or guarantee, however, is made with regards to accuracy, reliability or completeness. Conditions of use of the material are under the control of the user; therefore, it is the user's responsibility to determine the suitability and completeness of such information for any specific conditions/ use.

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| <b>SECTION 11</b> | <b>TOXICOLOGICAL INFORMATION</b> |
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This product is a mixture of components, and it has not been tested. Information from suppliers indicates that the product is not classifiable as hazardous

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| <b>SECTION 12</b> | <b>ECOLOGICAL INFORMATION</b> |
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**Environmental fate and distribution**

No specific environmental data are available for this product; this assessment is based on information for similar components/ products.

**Air:** This product has a low vapor pressure. As a result, it is unlikely to become an atmospheric contaminant under recommended conditions of use

**Water:** This product has low water solubility. Since it has a specific gravity of <1, if discharged to water, it will form a surface film. As the product is non-volatile and has a high binding affinity for particulate matter, it will absorb to particulates and form sediment.

**Soil:** This product is expected to have a high binding affinity for particulate matter in soil

**Degradation:** This product is expected to be inherently biodegradable.

**Environmental effects**

**Toxicity to water organisms:** Based on analogy to similar materials, this product is expected to exhibit low toxicity to aquatic organisms

**Toxicity to soil organisms:** No available information

**Bioaccumulation:** Bioaccumulation is unlikely due to the very low water solubility of this product; therefore bioavailability to aquatic organisms is minimal

**Fate and effects in water treatment plants**

This product or similar products have been shown to be non-toxic to sewage sludge bacteria

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| <b>SECTION 13</b> | <b>DISPOSAL CONSIDERATIONS</b> |
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When a decision is made to discard this material, it is not considered a hazardous waste under Resource Conservation and Recovery Act (RCRA).

State or local laws may impose additional regulatory requirements regarding disposal

**WASTE DISPOSAL :** Product is suitable for burning in an enclosed, controlled burner for fuel value. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be

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disposed of at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

**SECTION 14 TRANSPORT INFORMATION**

**Note:** The information provided below may not apply to all shipping situations. Consult appropriate Dangerous Goods Regulations for additional requirements and mode-specific, material-specific, or quantity-specific shipping requirements.

**United States Department of Transportation (US DOT):**

| UN/ID#   | Proper Shipping Name | Class/Division | Hazard Label(s) | Packing Group |
|--|----------------------|----------------|-----------------|---------------|
| Not Regulated As A Hazardous Material Or Dangerous Good For This Mode of Transportation. |                      |                |                 |               |

**International Air Transport Association (IATA):**

| UN/ID#   | Proper Shipping Name | Class/Division | Hazard Label(s) | Packing Group |
|--|----------------------|----------------|-----------------|---------------|
| Not Regulated As A Hazardous Material Or Dangerous Good For This Mode of Transportation. |                      |                |                 |               |

**SECTION 15 REGULATORY INFORMATION**

**OSHA HAZARD COMMUNICATION STANDARD:** When used for its intended purposes, this material is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

**NATIONAL CHEMICAL INVENTORY LISTING:** This product, and/ or its constituents, is listed on the US EPA/ TSCA (Toxic Substances Control Act) Inventory

**COMMUNITY RTK:**

| Chemical Name              | CAS Number | Typical Value | Component TPQ  | Product TPQ    |
|----------------------------|------------|---------------|----------------|----------------|
| Highly refined mineral oil | 64742-52-5 | 5-100%        | Not applicable | Not applicable |
|                            | 64742-53-6 | 0-80%         |                |                |
|                            | 64741-89-5 | <1%           |                |                |
| Proprietary additives      | *          | <1%           |                |                |

\* CAS#s and specific identities of additives are proprietary to the supplier(s) of certain of the highly refined mineral oils

**Section 304 CERCLA HAZARDOUS SUBSTANCES:**

This product contains no chemicals that are classified as hazardous under CERCLA

**SARA (311/312) REPORTABLE HAZARD CATEGORIES:**

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This product contains no chemicals that are classified as hazardous under SARA 312

**SARA (313) TOXIC RELEASE INVENTORY:**

This product contains no chemicals that are regulated under SARA 313

**International chemical inventories and hazard classifications**

**This product and/ or its components are on the Canadian Domestic Substance List/ NDSL, or are otherwise in compliance with related regulations.**

[WHMIS Classifications \(Canada\):](#)

This series of fluids is not controlled under provisions of WHMIS.

**This product and/ or its components are on EINECS (European Inventory of Existing Chemical Substances) and/ or ELINCS (European Library of Notified Chemical Substances), or is otherwise in conformance with related EU directives/ regulations.**

[EU Hazard Classification, risk and safety phrases \(Europe\):](#)

This series of fluids is not classified according to EU directives and regulations.

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| <b>SECTION 16</b> | <b>OTHER INFORMATION</b> |
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THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

**Revision Summary:**

- **October 15, 2005 -- This MSDS has been fully reviewed and reformatted to conform to changes in standard format**
- **May 14, 2007: Added Canadian and European classification and labeling information, based on current regulations and/or recommendations from suppliers (see Section 15)**
- **January 25, 2008: Removed CL100 due to reformulation and transferred to another MSDS [32]. Corrected errors in Product Codes (see Section 1). Updated and standardized format of Transport Information (see Section 14).**
- **March 6, 2008: Clarified wording of Section 304/CERCLA chemical classification in Regulatory Information (see Section 15)**

**NOTES:**