

SUNISO® 3GS Refrigeration Oil

Date of issue: 3/19/2012

Sonneborn Inc. urges the recipient of this Safety Data Sheet to study it carefully to become aware of hazards, if any, of the product involved. In the interest of safety you should (1) notify your employees, agents and contractors of the information of this sheet, (2) furnish a copy to each of your customers for the product and (3) request your customers to inform their employees and customers as well.

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance or preparation

Lubricating Oil

Use of substance/preparation:

This material is a severely refined naphthenic refrigeration system lubricant.

Company identification

Sonneborn Inc.
600 Parsippany Road, Suite 100
Parsippany, NJ 07054 USA

Emergency telephone number

Chemtrec (24hrs): 800-424-9300
Sonneborn: 724-756-2210

2. HAZARDS IDENTIFICATION

GHS Classification :Not classified as dangerous under EC/GHS-criteria

Human Health Hazards :None

Physico-chemical and environmental hazards and effects: None

HMIS RATING USA

| | | | |
|-----------|-----------------|---------------|--------|
| Health: 0 | Flammability: 1 | Reactivity: 0 | PPI: - |
|-----------|-----------------|---------------|--------|

3. COMPOSITION/INFORMATION ON INGREDIENTS

| INGREDIENT | % BY WEIGHT | CAS # | HAZARD | DANGER SYMBOL(S) |
|--|-------------|------------|--------|------------------|
| Distillates (Petroleum) hydrotreated heavy naphthenic | 100 | 64742-52-5 | | |

This is not a dangerous substance, if swallowed, do not induce vomiting.

4. FIRST AID MEASURES

Swallowing

Do not induce vomiting. Obtain medical attention immediately. This is not a toxic substance.

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Inhalation

Obtain medical attention. Oxygen may be given by qualified personnel if breathing is difficult or cyanosis (blue discoloration of skin) is noted. Give artificial respiration if not breathing. Remove to fresh air if aerosol spray is inhaled. Aspiration may cause pulmonary edema or aspiration pneumonia. Exposed persons should be kept under medical observation for at least 48 hours because delayed effects may occur.

Skin

No emergency care anticipated. Wash skin with soap and water.

Eye contact

Flush eyes thoroughly with water for several minutes. Obtain medical attention if discomfort persists.

5. FIRE-FIGHTING MEASURES

| |
|---|
| Flash Point: >93.4°C (>200°F), Method PMCC, ASTM D93 |
|---|

NFPA CLASSIFICATION USA

| | | | |
|-----------|-----------------|---------------|-----------------------|
| Health: 0 | Flammability: 1 | Reactivity: 0 | Special provisions: - |
|-----------|-----------------|---------------|-----------------------|

Extinguishing media

Suitable:

- Treat as an oil fire.
- dry chemical
- carbon dioxide (in case of small fires)
- water fog
- foam
- sand or earth

Unsuitable: Do not use water jet. Oil will float on water and can spread any fire.

Special fire fighting procedures

Do not direct a solid stream of water or foam into burning material; this may cause spattering and spread the fire. If a rail or tank truck is involved in a fire, ISOLATE for 800 meters (0.5 mile) in all directions. Shut off fuel to fire if it is possible to do so without hazard. If this is impossible, withdraw from the area and let the fire burn out under controlled conditions. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire.

Special protective equipment for firefighters

Self-contained breathing apparatus.

Unusual fire and explosion hazards

This product will float upon water, so water spray is not a suitable extinguishing agent as it may cause any fire to spread.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear suitable protective equipment. Eliminate sources of ignition.

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Environmental precautions

This product is insoluble in water and will float on the surface. Prevent from entering sewers or drains. Should this product enter sewers or drains, it should be pumped out into an open vessel. Emergency services may need to be called to assist in this operation.

Methods for cleaning up

Dike to contain spill. Absorb on inert material such as sand, earth, vermiculite. Stop the leak if it can be done without risk. Floor may be slippery; use care to avoid falling.

7. HANDLING AND STORAGE

HANDLING

Do not handle at temperatures $>+40^{\circ}\text{C}$, unless wearing appropriate protective equipment.

Ventilation

General (mechanical) room ventilation is expected to be satisfactory for use at room temperature.

STORAGE

Storage requirements

Keep away from heat, sparks and flame. Store in a dry place. Store protected from light.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

| COMPONENT | COUNTRY | TYPE/REMARK | VALUE |
|------------------|---------|--|---|
| Mineral Oil Mist | | If used in a way that generates A "mist" observe the limits for Mineral Oil Mist. TWA (mist), ACGIH STEL (mist), ACGIH | 5mg/m ³ 10mg/m ³ |

OCCUPATIONAL EXPOSURE CONTROLS

Respiratory protection

None expected to be needed. If used in a way that generates a vapor/mist, wear an organic vapor respirator.

Hand protection/protective gloves

Wear oil resistant gloves.

Eye protection

Face shield or chemical splash goggles in case of splashing.

Skin protection

Wear protective clothing, such as long sleeves to minimize skin contact.

Environmental Exposure Controls:

Store in a second containment to catch leakages

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9. FIRST AID MEASURES

Appearance

| | |
|-----------------|------------------------|
| Physical State: | Liquid |
| Color: | Amber |
| Odor: | None or Mild Petroleum |
| Odor Threshold: | N/A |

Important health, safety and environmental information

| | |
|---------------------------------------|---|
| Flash Point: | >93.4°C (>200°F) Method: PMCC, ASTM D93 |
| Upper explosion limits: | Not determined |
| Lower explosion limits: | Not determined |
| Vapor Pressure: | <0.1 kPa at 20°C |
| Density: | 0.81 – 0.89 g/cm ³ at 20°C |
| Bulk Density: | Not available |
| Solubility in Water: | Insoluble |
| Solubility in organic solvents: | Soluble |
| Kinematic viscosity: | > 20.5 mm ² /s at 40°C (> 100 SUS @ 100°F) |
| Boiling Point: | > 230°C. |
| PH: | N/A |
| Specific gravity (H ₂ O=1) | <1 |
| Partitioning coefficient | log POW: >6 This product is soluble in oil. |
| Vapor Density: | N/A |
| Percent volatiles | Nil |
| Autoignition Temperature: | No Data |
| Melting Point: | N/A |

10. STABILITY AND REACTIVITY

Stability: Stable

Conditions/Materials to avoid: Extreme temperature and direct sunlight/ultraviolet light and strong oxidizing agents.

Hazardous combustion products

Burning can produce the following combustion products: Oxides of carbon and Soot

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

GENERAL

No evidence of harmful effects from available information.

12. ECOLOGICAL INFORMATION

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This product is stable in water, and can be mechanically separated from water. The water may be suitable for disposal in a biological waste water treatment plant.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with appropriate Federal, State and local regulations or incinerate.

14. TRANSPORT INFORMATION

ADR/RID/IMDG/ICAO

This product is not regulated by ADR / RID / IMDG / ICAO.

USA – This product is not regulated by DOT, Freight Description Road: 65 Petroleum Oil, N.O.I.B.N.

15. REGULATORY INFORMATION

GHS classification

GHS Classification: Not classified as dangerous under EC/GHS-criteria

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40CFR372 (for SARA 313). This information must be included in SDS's that are copied and distributed for this material.

Components present in this product at a level which could require reporting under the statute are:

****NONE****

New Jersey Worker and Community Right-To-Know Act (Labeling Requirements)

Chemical name

Distillates (Petroleum) hydrotreated
heavy naphthenic

CAS#

64742-52-5

New Jersey TS Number

EPA Hazard Categories (SARA 311, 312): None

WHMIS Classification: This product is not a WHMIS controlled product.

Chemical Inventory

Canada:

The ingredients of this product are on the DSL.

Europe:

The ingredients of this product are on the EINECS inventory.

United States:

The ingredients of this product are on the TSCA inventory.

Australia:

The ingredients of this product are on the AICS inventory.

China:

This product is on the IECSC inventory.

Japan:

The ingredients of this product are on the ENCS inventory.

Korea:

This product is listed on the Existing Chemicals List (ECL).

Philippines:

This product is on the PICCS.

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16. OTHER INFORMATION

Recommended uses and restrictions

Please consult the product and/or application information bulletins for this product.

Further information, Europe

Where appropriate, use CE approved personal protection equipment.

This Safety Data Sheet conforms to EC Directive 1907/2006 and amendments.

The opinions expressed herein are those of qualified experts within Sonneborn Inc. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and of these opinions and the conditions of use of this product are not within the control of Sonneborn Inc., it is the user's obligation to determine the conditions of safe use of the products.