SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label: SUNISO® 4GS Refrigeration Oil

Product Code(s): L317 (P/N 475327), L319 (P/N 475330), L322 (P/N 475336), L325 (475341), L352 (P/N 475346), L355 (P/N 475349) and L358 (P/N 475351).

Recommended use of the chemical and restrictions on use:

- Professional Use Only. Severely refined, naphthenic refrigeration system lubricant.

Chemical family:

- Mixture. Petroleum distillates

Name, address, and telephone number of the supplier:

Parker Hannifin Corporation - Sporlan Division

206 Lange Drive
Washington, MO, U.S.A. 63090

Supplier's Telephone # : (636) 239-1111

24 Hr. Emergency Tel # : Chemtrec 1-800-424-9300 (Within Continental U.S.); Chemtrec 703-527-3887 (Outside U.S.).

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical:

WHMIS classification: This product is not a WHMIS controlled product in Canada. It does not meet any of the criteria for a controlled product provided in Part IV of the Controlled Products Regulations (CPR).

OSHA: This material is not classified as hazardous under OSHA regulations (29CFR 1910.1200) (Hazcom 2012).

Label elements:

The following label information is applicable only to the United States according to OSHA Regulations (29 CFR 1910.1200) (Hazcom 2012):

Signal Word

- Not required

Hazard statement(s)

- None required.

Precautionary statement(s)

- None required.

The following label information is applicable only to Canada according to the Canadian Controlled Products Regulations (CPR/WHMIS):

This product is not a WHMIS controlled product in Canada. As such, this product does not require a WHMIS Supplier label.
SAFETY DATA SHEET

Other hazards
Other hazards which do not result in classification:
Burning produces obnoxious and toxic fumes. May be mildly irritating to eyes and skin. Oils can block the skin pores causing an acne-like disorder. Ingestion can cause gastrointestinal irritation, nausea, and diarrhea. May cause irritation to the nose, throat and upper respiratory tract. If product is heated or mists are formed, inhalation may cause irritation to the nose, throat and respiratory tract.
Environmental precautions: Avoid release to the environment. See ECOLOGICAL INFORMATION, Section 12.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS #</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated</td>
<td>64742-52-5</td>
<td>90.0 - 100.0</td>
</tr>
<tr>
<td>heavy naphthenic</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

**Ingestion**: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

**Inhalation**: Move to fresh air. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing has stopped, give artificial respiration. If irritation or symptoms develop, seek medical attention.

**Skin contact**: For skin contact, wash with soap and water while removing contaminated clothing. If irritation persists, seek prompt medical attention. Wash contaminated clothing before reuse.

**Eye contact**: Immediately flush eyes with running water for at least 5 to 10 minutes. If irritation persists, seek prompt medical attention.

Most important symptoms and effects, both acute and delayed

- May be mildly irritating to eyes and skin. May cause irritation, redness and pain. Oils can block the skin pores causing an acne-like disorder. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause irritation of mouth, throat, and stomach. May cause irritation of respiratory tract. Symptoms may include coughing, choking and wheezing.

Indication of any immediate medical attention and special treatment needed

- Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing media**

- **Suitable extinguishing media**: Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical.

- **Unsuitable extinguishing media**: Do not use water jet, as this may spread burning material.

**Special hazards arising from the substance or mixture / Conditions of flammability**

- Not flammable under normal conditions of use. However, may ignite if exposed to extreme heat and flame. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

**Flammability classification (OSHA 29 CFR 1910.106)**

- Non-flammable.

**Explosion Data: Sensitivity to Mechanical Impact / Static Discharge**

- Not expected to be sensitive to mechanical impact or static discharge.

**Hazardous combustion products**

- Carbon oxides; Nitrogen oxides; sulfur oxides; Phosphorus compounds; Polycyclic aromatic hydrocarbons. Other unidentified organic compounds.

**Special protective equipment and precautions for firefighters**
SAFETY DATA SHEET

Protective equipment for fire-fighters

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

Special fire-fighting procedures

Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. Prevent fire extinguishing water from contaminating surface water or the ground water system. Dike for water control.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Refer to protective measures listed in sections 7 and 8.

Environmental precautions

Ensure spilled product does not enter drains, sewers, waterways, or confined spaces.

Methods and material for containment and cleaning up

Remove all sources of ignition. Ventilate area of release. Stop the spill at source if it is safe to do so. Dike for water control. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13). Notify the appropriate authorities as required. Refer to Section 13 for disposal of contaminated material.

Special spill response procedures

If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8802).

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Wear suitable protective equipment during handling. Use with adequate ventilation. Avoid breathing vapors, fumes or dust. Avoid contact with skin, eyes and clothing. Keep away from extreme heat and flame. Avoid contact with incompatible materials. Keep containers closed when not in use. Wash thoroughly after handling. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

Conditions for safe storage

Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Inspect periodically for damage or leaks. Protect against physical damage. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel.

Incompatible materials

Oxidizing agents.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
</tr>
<tr>
<td>Distillates (petroleum),</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hydrotreated heavy naphthenic</td>
<td>5 mg/m³</td>
<td>N/Av</td>
</tr>
<tr>
<td>(As 'Oil mist, mineral')</td>
<td>(As 'Oil</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mist, mineral')</td>
<td></td>
</tr>
</tbody>
</table>

Exposure controls

Ventilation and engineering measures

Use with adequate ventilation. Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits.
SAFETY DATA SHEET

Respiratory protection : If the TLV is exceeded, a NIOSH/MSHA-approved respirator is advised. Advice should be sought from respiratory protection specialists.

Skin protection : Gloves impervious to the material are recommended. Advice should be sought from glove suppliers.

Eye / face protection : Safety goggles or glasses as appropriate for the job.

Other protective equipment : Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact. Ensure that eyewash stations and safety showers are close to the workstation location.

General hygiene considerations : Avoid breathing mist or vapours. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Amber liquid.</td>
</tr>
<tr>
<td>Odour</td>
<td>Petroleum odor.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>N/Av</td>
</tr>
<tr>
<td>pH</td>
<td>N/Av</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>N/Av</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>&gt;230°C (446°F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 93.3°C (200°F)</td>
</tr>
<tr>
<td>Flashpoint (Method)</td>
<td>N/Av Pensky Martens Closed Cup</td>
</tr>
<tr>
<td>Evaporation rate (BuAe = 1)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not flammable.</td>
</tr>
<tr>
<td>Lower flammable limit (% by vol.)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Upper flammable limit (% by vol.)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>None known.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not explosive</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>&lt;0.01 mmHg (0.008 kPa)</td>
</tr>
<tr>
<td>Vapour density</td>
<td>N/Av</td>
</tr>
<tr>
<td>Relative density / Specific gravity</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>insoluble</td>
</tr>
<tr>
<td>Other solubility(ies)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water or Coefficient of water/oil distribution</td>
<td>&gt;20</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>N/Av</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>N/Av</td>
</tr>
<tr>
<td>Viscosity</td>
<td>19-150 mm2S @ 40°C (104°F)</td>
</tr>
<tr>
<td>Volatiles (% by weight)</td>
<td>Nil</td>
</tr>
<tr>
<td>Volatile organic Compounds (VOC's)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Absolute pressure of container</td>
<td>N/Ap</td>
</tr>
<tr>
<td>Flame projection length</td>
<td>N/Ap</td>
</tr>
<tr>
<td>Other physical/chemical comments</td>
<td>No additional information.</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

SECTION 10. STABILITY AND REACTIVITY
Reactivity: Not normally reactive.
Chemical stability: Stable under the recommended storage and handling conditions prescribed.
Possibility of hazardous reactions:
Conditions to avoid:
Incompatible materials:
Hazardous decomposition products:

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:
Routes of entry inhalation: YES
Routes of entry skin & eye: YES
Routes of entry Ingestion: YES
Routes of exposure skin absorption: NO

Potential Health Effects:
Signs and symptoms of short-term (acute) exposure

Signs and symptoms Inhalation
: If product is heated or mists are formed, inhalation may cause irritation to the nose, throat and respiratory tract.

Signs and symptoms ingestion
: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause irritation of mouth, throat, and stomach.

Signs and symptoms skin
: Direct skin contact may cause slight or mild, transient irritation.

Signs and symptoms eyes
: May cause mild irritation, redness and watering.

Potential Chronic Health Effects:
Oils can block the skin pores causing an acne-like disorder.

Mutagenicity: Not expected to be mutagenic in humans.
Carcinogenicity: No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive effects & Teratogenicity:
Not expected to cause reproductive effects.

Senitization to material:
This material is not classified as hazardous under OSHA regulations (29CFR 1910.1200) (Hazcom 2012).

Specific target organ effects:
The substance or mixture is not classified as specific target organ toxicant, single exposure.

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Irritancy:
Mild eye irritant. Mild skin irritant.

Medical conditions aggravated by overexposure:
Pre-existing skin and respiratory disorders.

Synergistic materials:
Not available.

Toxicological data:
See below for toxicological data on the substance.
SAFETY DATA SHEET

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>LC50(4hr)</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>inh, rat</td>
<td>(Oral, rat)</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>&gt; 5 mg/L (mist)</td>
<td>&gt; 5000 mg/kg</td>
</tr>
</tbody>
</table>

Other important toxicological hazards
: None known or reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
: The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. See the following tables for individual ingredient ecotoxicity data.

Ecotoxicity data:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Daphnia</th>
<th>Toxicity to Algae</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>LC50 / 96h</td>
<td>NOEC / 21 day</td>
<td>M Factor</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>64742-52-5</td>
<td>&gt; 5000 mg/L (Rainbow trout)</td>
<td>N/Av</td>
<td>None.</td>
</tr>
</tbody>
</table>

Persistence and degradability
: Inherently biodegradable.

Bioaccumulation potential
: The product itself has not been tested.

Mobility in soil
: The product itself has not been tested.

Other Adverse Environmental effects
: None known.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal
: Handle waste according to recommendations in Section 7.

Methods of Disposal
: Dispose in accordance with all applicable federal, state, provincial and local regulations.

RCRA
: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.
SAFETY DATA SHEET

SECTION 14. TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>Regulatory Information</th>
<th>UN Number</th>
<th>UN proper shipping name</th>
<th>Transport hazard class(es)</th>
<th>Packing Group</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>49CFR/DOT Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDG</td>
<td>None.</td>
<td>Not regulated.</td>
<td>Not regulated</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>TDG Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICAO/IATA</td>
<td>None.</td>
<td>Not regulated.</td>
<td>Not regulated</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>ICAO/IATA Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Special precautions for user: Appropriate advice on safety must accompany the package.

Environmental hazards: This substance does not meet the criteria for an environmentally hazardous substance according to the IMDG Code. See ECOLOGICAL INFORMATION, Section 12.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: This information is not available.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:
Components listed below are present on the following U.S. Federal chemical lists:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>TSCA Inventory</th>
<th>CERCLA Reportable Quantity(RQ) (40 CFR 117.302):</th>
<th>SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355:</th>
<th>SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical Toxic Chemical de minimus Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>64742-52-5</td>
<td>Yes</td>
<td>N/Ap</td>
<td>N/Av</td>
<td>No</td>
</tr>
</tbody>
</table>

US State Right to Know Laws:
The following chemicals are specifically listed by individual States:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>California Proposition 65</th>
<th>State &quot;Right to Know&quot; Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>64742-52-5</td>
<td>No</td>
<td>CA</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>64742-52-5</td>
<td>No</td>
<td>N/Ap</td>
</tr>
</tbody>
</table>
Canadian Information:
Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.

International Information:
Components listed below are present on the following International Inventory list:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>European EINECs</th>
<th>Australia AICS</th>
<th>Philippines PICCS</th>
<th>Japan ENCS</th>
<th>Korea KECl/KECL</th>
<th>China IECSC</th>
<th>NewZealand IOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>64742-52-5</td>
<td>265-155-0</td>
<td>Present</td>
<td>Present</td>
<td>(9)-1689</td>
<td>KE-12543</td>
<td>Present</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

SECTION 16. OTHER INFORMATION

Legend:
AGCIH: American Conference of Governmental Industrial Hygienists
CA: California
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
DOT: Department of Transportation
EPA: Environmental Protection Agency
HMIS: Hazardous Materials Identification System
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
Inh: Inhalation
IUCLID: International Uniform Chemical Information Database
MA: Massachusetts
MN: Minnesota
mppcf: million particles per cubic foot
MSHA: Mine Safety and Health Administration
N/Ap: Not Applicable
N/Av: Not Available
NFPA: National Fire Protection Association
NOSH: National Institute of Occupational Safety and Health
NJ: New Jersey
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PA: Pennsylvania
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
RI: Rhode Island
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System
SAFETY DATA SHEET

References:
1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2014.
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2015 (Chempendium, HSDB and RTECs).
4. Material Safety Data Sheets from manufacturer.
5. US EPA Title III List of Lists - October 2012

Preparation Date (mm/dd/yyyy):
08/27/2010

Reviewed Date SDS (dd/mm/yyyy):
17/04/2015

Revision No.:
3

Revision Information:
All (format change)

Other special considerations for handling:
Provide adequate information, instruction and training for operators.

HMIS Rating:
- * - Chronic hazard
- 0 - Minimal
- 1 - Slight
- 2 - Moderate
- 3 - Serious
- 4 - Severe

Reactivity:
0

Flammability:
0

Health:
1

Instability:
0

Special Hazards:
None.

Prepared for:
Parker Hannifin Corporation   Sporlan Division
206 Lange Drive, Washington, MO 63090 U.S.A.
Telephone: (636) 239-1111
www.parker.com
Direct all enquiries to: Parker Hannifin Corp.   Sporlan Division.

Prepared by:
ICC The Compliance Center Inc.
Telephone: (888) 442-9628 (U.S.): (888) 977-4834 (Canada)
http://www.thecompliancecenter.com

DISCLAIMER
This Safety Data Sheet was prepared by ICC The Compliance Center Inc. using information provided by Parker Hannifin Corporation and CCOHS’ Web Information Service. The information in the Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and Parker Hannifin Corporation expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.
This Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ICC The Compliance Center Inc. and Parker Hannifin Corporation.

END OF DOCUMENT