

## SAFETY DATA SHEET

| SECTION 1: PRODUCT AND COM  | TION 1: PRODUCT AND COMPANY IDENTIFICATION                          |  |
|-----------------------------|---|--|
| PRODUCT                     |   |  |
| Product Name:               | CAMCO 4600-15 SC  |  |
| Product Description:        | Highly Refined Synthetic Hydrocarbon Oil with Additives.            |  |
| Intended Use:               | Seal Fluid, Lubricant, Compressor Lubricant                         |  |
| COMPANY IDENTIFICATION      |   |  |
| Supplier                    | CAMCO   |  |
|                             | 1544 134th Ave. NE  |  |
|                             | Ham Lake, MN 55304-4977   |  |
|                             | PH: +1 763-205-0828   |  |
| Emergency telephone numbers | USA – Chemtrec: 800-424-9300 All Others – Chemtrec: +1-703-527-3887 |  |

## SECTION 2: HAZARDS IDENTIFICATION

## HEALTH HAZARDS

Aspiration toxicant: Category 1.

Signal Word: Danger

**GHS Symbol:** 



Health Hazards: May be fatal if swallowed and enters airways. Precautionary Hazard - Response: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Do NOT induce vomiting. Precautionary Hazard - Storage: Store locked up.

**Precautionary Hazard - Disposal:** Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

Other Hazard: None known.

*This information is based on test data from similar products.* This product is not formulated to contain ingredients which have exposure limits established by regulatory agencies. It is not hazardous to health as defined by the European Union Dangerous Substances / Preparations Directives. Low order of toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure injection under skin may cause serious damage.

**Note:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.



| <b>SECTION 3: COMPONE</b>                        | NT INFORMAT                              | TION  |   |  |   |  |  |
|--|--|---|---|--|---|--|--|
| Chemical Name: MIXTU                             | RE                                       | CAS #   | EINECs/ELINKs #                               | Percent (% wt)   | Symbols /Risk Phrases                                   |  |  |
| Synthetic Hydrocarbo                             | on Fluids Proprietary >96% None Required |   |   |  |   |  |  |
| Additives  |  | Proprietary   |   | <4%  | None Required   |  |  |
|  | Substance(s)                             | or Complex Substance(s)   | )   | (1)0   |   |  |  |
| Contains no hazardous                            |  |   |   |  |   |  |  |
| Explanation of symbols<br>No Classification Requ | iired,<br>ITS                            |   |   |  |   |  |  |
|  |  | for classified components t<br>information yet, or there co   |   |  |   |  |  |
| exemption, have not sen                          | it the complete i                        | information yet, or there co  | buid be no obligation t                       |  | AS numbers.   |  |  |
| SECTION 4 : FIRST AI                             |  |   |   |  |   |  |  |
| Inhalation:                                      |  | further exposure For the  | se providing assistant                        |  | to yourself or others. Use                              |  |  |
|  | adequate res<br>seek immedia             | piratory protection. If res   | piratory irritation, dizz                     | iness, nausea, oi  | r unconsciousness occurs,<br>n with a mechanical device |  |  |
| Skin:  | Wash with soa<br>get medical at          | ap and water. Remove and  | l launder contaminate                         | d clothing before r  | euse. If irritation develops                            |  |  |
| Eye :  |  | hly with water. If irritation   | occurs det medical a                          | ssistance  |   |  |  |
| Ingestion:                                       |  | rmally not required. Seek n   |   |  |   |  |  |
| <b>J</b>   |  | ······  |   |  |   |  |  |
| SECTION 5 : FIRE FIG                             | HTING PROCE                              | DURES   |   |  |   |  |  |
| EXTINGUISHING MEDI.                              |  | Appropriate Extinguishing M<br>D extinguish flames.   | fedia: Use water fog,                         | foam, dry chemica  | al or carbon dioxide (CO2)                              |  |  |
|  |  | nappropriate Extinguishing  |   |  |   |  |  |
| FIRE FIGHTING                                    | e<br>p                                   | Fire Fighting Instructions: E<br>Entering streams, sewers or<br>protective equipment and in<br>Use water spray to cool fire | drinking water supply<br>enclosed spaces, sel | <ul> <li>Fire-fighters sho<br/>f-contained breath</li> </ul> | ould use standard<br>ing apparatus (SCBA).              |  |  |
|  | Н  | lazardous Combustion Pro  | ducts: Smoke, Fume                            | , Carbon Monoxid   | le, Aldehydes,  |  |  |
| FLAMMABILITY PROPE                               | RTIES F                                  | lash Point ASTM D92 (ope  | en cup typical) °C (°F)                       | 219 (426) typical  |   |  |  |
|  |  | ammable Limits (Approxin  |   |  | .: N/D  |  |  |
|  |  |   |   |  |   |  |  |
| SECTION 6 : SPILL OR                             |  |   |   |  |   |  |  |
| SPILL MANAGEMENT                                 | Land Spill:                              | Stop leak if you can do so  | without risk. Recove                          | r by pumping or wi   | th suitable absorbent.                                  |  |  |
|  |  | : Stop leak if you can do so<br>ing. Remove from the sur  |   |  | tely with booms. Warn bents. Seek the advice of         |  |  |

Water spill and land spill recommendations are based on the most likely spill scenario for this material;<br/>however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current<br/>direction and speed may greatly influence the appropriate action to be taken. For this reason, local<br/>experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.ENVIRONMENTAL<br/>PRECAUTIONSLarge Spills: Dyke far ahead of liquid spill for later recovery and disposal. Prevent entry into<br/>waterways, sewers, basements or confined areas.

a specialist before using dispersants.



| SECTION 7 : HAN | IDLING AND STORAGE   |
|-----------------|--|
| HANDLING        | Prevent small spills and leakage to avoid slip hazard.<br>Static Accumulator: This material is a static accumulator. |
| STORAGE         | Do not store in open or unlabeled containers.  |

## SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits/standards for materials that can be formed when handling this product: When mists / aerosols can occur, the following are recommended:  $5 \text{ mg/m}^3 - \text{ACGIH TLV}$ ,  $10 \text{ mg/m}^3 - \text{ACGIH STEL}$ .

| ENGINEERING CONTROLS       The level of protection and types of controls necessary will vary depending upon preventions. Control measures to consider:<br>No special requirements under ordinary conditions of use and with adequate ventilation         PERSONAL PROTECTION       Personal protective equipment selections vary based on potential exposure conditions sure applications, handling practices, concentration and ventilation. Information on the selection protective equipment for use with this material, as provided below, is based upon intended normal usage.         Respiratory Protection:       Respiratory Protection:       If engineering controls do not maintain airborne contamplications and experiment is adequate to protect the protection and the protection is adequate to protect the protection is adequated. | h as<br>n of<br>,<br>inant<br>irator |
|---|--------------------------------------|
| No special requirements under ordinary conditions of use and with adequate ventilation           PERSONAL PROTECTION         Personal protective equipment selections vary based on potential exposure conditions such applications, handling practices, concentration and ventilation. Information on the selection protective equipment for use with this material, as provided below, is based upon intended normal usage.           Respiratory Protection:         Respiratory Protection:         If engineering controls do not maintain airborne contain  | n of<br>,<br>inant<br>irator         |
| applications, handling practices, concentration and ventilation. Information on the selection protective equipment for use with this material, as provided below, is based upon intended normal usage.           Respiratory Protection:         Respiratory Protection:  | n of<br>,<br>inant<br>irator         |
|   | rator                                |
| concentrations at a level which is adequate to protect worker health, an approved resp<br>may be appropriate. Respirator selection, use, and maintenance must be in accordance<br>regulatory requirements, if applicable. Types of respirators to be considered for this ma<br>include:   |                                      |
| No special requirements under ordinary conditions of use and with adequate ventilation.   |                                      |
| For high airborne concentrations, use an approved supplied-air respirator, operated in por<br>pressure mode. Supplied air respirators with an escape bottle may be appropriate<br>oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying<br>capacity/rating may be exceeded.  | when                                 |
| Hand Protection: Any specific glove information provided is based on published literature and manufacturer data. Glove suitability and breakthrough time will differ depending on the sp use conditions. Contact the glove manufacturer for specific advice on glove selection breakthrough times for your use conditions. Inspect and replace worn or damaged gloves types of gloves to be considered for this material include:   | ecific<br>and                        |
| No protection is ordinarily required under normal conditions of use.  |                                      |
| Eye Protection: If contact is likely, safety glasses with side shields are recommended.   |                                      |
| Skin and Body Protection: Any specific clothing information provided is based on published literature or manufaction data. The types of clothing to be considered for this material include:  | turer                                |
| No skin protection is ordinarily required under normal conditions of use. In accordance good industrial hygiene practices, precautions should be taken to avoid skin contact.   | with                                 |
| Specific Hygiene Measures Always observe good personal hygiene measures, such as washing after handling the ma<br>and before eating, drinking, and/or smoking. Routinely wash work clothing and prote<br>equipment to remove contaminants. Discard contaminated clothing and footwear that c<br>be cleaned. Practice good housekeeping.   | ctive                                |
| ENVIRONMENTAL CONTROLS See Sections 6, 7, 12, 13.   |                                      |



| SECTION 9 : PHYSICA | L & CHEMICAL PROPERTIES            |   |   |
|---------------------|------------------------------------|---|---|
| Typical physi       | cal and chemical properties are gi | ven below. Consult the Supplie            | er in Section 1 for additional data.                          |
| General Information |                                    | HEALTH, SAFETY, AND EN                    | VIRONMENTAL INFORMATION                                       |
| Physical State      | Liquid                             | Density at 20°C                           | 0.82 - 0.83   |
| Color               | Clear colorless to pale yellow     | Flash Point typical °C (°F)               | 219 (426) See Section 5                                       |
| Odor                | Characteristic                     | Flammable Limits                          | LEL: N/D UEL: N/D   |
| Odor Threshold      | N/D                                | Autoignition Temperature:                 | ND  |
|                     |                                    | Boiling Point °C (°F)                     | >400 (752)  |
| OTHER INFORMATION   | <u>1</u>                           | Vapor Density (Air=1)                     | NA  |
| Pour Point °C (°F)  | -54 (-65 ) or below typical        | Vapor Pressure                            | < 0.1 mm Hg_at 20°C (68°F)<br>< 1.70 mm HG at 177 °C (351 °F) |
| Freezing Point      | N/D                                | Evaporation Rate (N-Butyl Acetate = 1):   | N/D   |
| Viscosity 40°C c    | St 16-18                           | Molecular Weight                          | Varies  |
| · · · · ·           |                                    | Solubility in Water                       | Nil   |
|                     |                                    | Oxidizing Properties                      | See Sections 3, 15, 16.                                       |
|                     |                                    | Partition coefficient:<br>n-octanol/water | No data available   |
|                     |                                    |   |   |

| SECTION 10 : STABILITY & REACTIVITY |  |
|-------------------------------------|--|
| STABILITY:                          | Material is stable under normal conditions.          |
| CONDITIONS TO AVOID:                | Excessive heat. High energy sources of ignition.     |
| MATERIALS TO AVOID:                 | Strong oxidizers                                     |
| HAZARDOUS DECOMPOSITION PRODUCTS:   | Material does not decompose at ambient temperatures. |
| HAZARDOUS POLYMERIZATION:           | Will not occur.                                      |

#### SECTION 11: TOXICOLOGICAL INFORMATION

## ACUTE TOXICITY

Potential acute health effects

Aspiration toxicity: May be fatal if swallowed and enters airways. Substances known to cause human aspiration toxicity hazards or to be regarded as if they cause human aspiration toxicity hazard.

Minimally Toxic. Based on test data for structurally similar materials.

Minimally Toxic. Based on test data for structurally similar materials.

Negligible irritation to skin at ambient temperatures. Based on test data for

Inhalation : No known significant effects or critical hazards. Ingestion : No known significant effects or critical hazards. Skin contact : No known significant effects or critical hazards. Eye contact : No known significant effects or critical hazards.

# Route of Exposure

#### **Conclusion / Remarks**

| Toxicity: LC50 >5000 mg/m3<br>(4hour/hours) | Minimally Toxic. Based on test data for structurally similar materials.                           |
|---|---|
| Irritation: No end point data.              | Negligible hazard at ambient/normal handling temperatures. Based on assessment of the components. |
|   |   |

## INGESTION

Toxicity: LD50 > 5000 mg/kg (rat)

## Skin

Toxicity: LD50 > 5000 mg/kg (rabbit) Irritation: Data available.

#### Eye

Irritation: Data available. May cause mild, short-lasting discomfort to eyes. Based on test data for structurally similar materials.

structurally similar materials.



#### **CHRONIC/OTHER EFFECTS**

#### For the product itself:

Repeated and/or prolonged exposure may cause irritation to the skin, eyes, or respiratory tract.

#### **Contains:**

Synthetic base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals. Synthetic base oils: Not expected to cause significant health effects under conditions of normal use, based on laboratory studies with the same or similar materials. Not mutagenic or genotoxic. Not sensitizing in test animals and humans.

## CARCINOGENIC EFFECTS:

Contains no carcinogens. Similar compounds essentially non-toxic. No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA), NTP or IARC.

MUTAGENIC EFFECTS: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen.

TERATOGENIC EFFECTS/DEVELOPMENTAL TOXICITY: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic.

REPRODUCTION TOXICITY: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a reproductive toxin.

Additional information is available by request.

#### **OVER – EXPOSURE SIGNS/SYMPTOMS**

SkinNo known significant effects or critical hazards.IngestionNo known significant effects or critical hazards.InhalationNo known significant effects or critical hazards.

## SECTION 12 : ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials. ECOTOXICITY

Material -- Not expected to be harmful to aquatic organisms based on data for similar materials.

| Toxicity to fish                                    | LC50: > 750 mg/l                              |
|---|---|
|   | Exposure time: 96 HR                          |
|   | Species: Pimephales promelas (fathead minnow) |
|   |   |
|   | LC50: > 1,000 mg/l                            |
|   | Exposure time: 96 h                           |
|   | Species: Salmo gairdneri (Rainbow trout)      |
| Toxicity to daphnia and other aquatic invertebrates |   |
| 1-Decene Homopolymer Hydrogenated                   | EL50: > 190 mg/l                              |
|   | Exposure time: 48 HR                          |
|   | Species: Daphnia magna (Water flea)           |
|   | static test Method: OECD Test Guideline 202   |
| Toxicity to algae                                   | EC50: > 1,000 mg/l                            |
|   | Exposure time: 96 HR                          |



Species: Selenastrum capricornutum (algae)

MOBILITY

Base oil component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

#### BIODEGRADATION

Base oil component -- This material is not expected to be readily biodegradable. Expected to be inherently biodegradable

#### **BIOACCUMULATION POTENTIAL**

Base oil component -- This material is not expected to bioaccumulate

ECOLOGICAL DATA - Other

| Care should be taken to minimize re                                | lease of this product into the   | environment   |  |
|--|--|---|--|
| Environmental Fate & Distribution                                  | No Data Available  | Other Typical (not a specification  | n)   |
| Persistence & Degradation Toxicity<br>Effect on Effluent Treatment | No Data Available<br>Product may be partially<br>removed in biological<br>treatment processes. | Acute Toxicity to Fish:<br>Effect Concentration on Algae:<br>Ready Biodegradability:<br>Respiration Inhibition:<br>Adsorption/Desorption: | No Data Available<br>No Data Available<br>Inherent<br>No Data Available<br>No Data Available |
|  |  | Abiotic Degradability-Hydrolysis :  | Not measurable   |

## SECTION 13 : DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

#### **DISPOSAL RECOMMENDATIONS**

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

#### **REGULATORY DISPOSAL INFORMATION**

#### European Waste Code: 13 02 06

NOTE: These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste producers need to assess the actual process used when generating the waste and its contaminants in order to assign the proper waste disposal code(s).

This material is considered as hazardous waste pursuant to Directive 91/689/EEC on hazardous waste, and subject to the provisions of that Directive unless Article 1(5) of that Directive applies.

**Empty Container Warning** Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. 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.



# SECTION 14 : TRANSPORT INFORMATION

LAND (ADR/RID) : Not Regulated for Land Transport INLAND WATERWAYS (ADNR) : Not Regulated for Inland Waterways Transport

SEA (IMDG) : Not Regulated for Sea Transport according to IMDG-Code

AIR (IATA) : Not Regulated for Air Transport

| AIR (IATA). Not Regulated for All Transport       |                                     |
|---|-------------------------------------|
| US DOT Classification: Not Regulated              | ICAO/IATA Classification            |
| Marine Pollutant: Not a Pollutant                 | Proper shipping name: Not regulated |
| Special Provisions for transport: None Identified | IATA Class                          |
|   | UN number: Not regulated.           |
|   | Packing Group: Not regulated.       |
| ADR/RID Classification                            | IMO/IMDG Classification             |
| UN number: Not regulated.                         | Proper shipping name: Not regulated |
| Proper shipping name: Not regulated.              | IMDG Class: Not regulated           |
| ADR/RID Class: Not regulated.                     | UN number: Not regulated.           |
| Packing Group: Not regulated.                     | Packing Group: Not regulated.       |
|   | Marine Pollutant: Not pollutant.    |

USA: No special warning labels are required under OSHA 29CFR 1910.1200. OSHA hazard warnings are not applicable for this product; therefore no OSHA Warnings would appear on the label. No EPA hazard classification code.

#### **SECTION 15: Regulatory Information Product Component Ingredients**

Europe

Material is not dangerous as defined by the EU Dangerous Substances/Preparations Directives. EU LABELING: Not regulated according to EC Directives. Material is not dangerous as defined by the EU Dangerous Substances/Preparations Directives.

Classification and labeling have been performed according to EU Directives 67/548/EEC, 1999/45/EC and 2001/58/EC (including amendments) and the intended use. - Consumer applications.

#### **United States**

## **EPA SARA Title III Chemical Listings**

Section 302 Extremely Hazardous Substances: None.

Section 304 CERCLA Hazardous Substances: None.

SARA 311/312 Hazards No SARA Hazards

Section 313 This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**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.

#### **Clean Air Act**

**Ozone-Depletion Potential ;** 

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

#### Canada

**WHMIS** (Canadian Workplace Hazardous Materials Information System) This product when tested as a whole is not a controlled substance within the meaning of the Hazardous Products Act.

Germany: Water Hazardous Class (WGK): 1 (low hazard to water)

## NATIONAL LEGISLATION / REGULATIONS

Ozone depleting chemicals: No ozone depleting chemicals are present or used in manufacture.

## REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS

**Complies with the following national/regional chemical inventory requirements:** AICS, IECSC, DSL, EINECS, ENCS, KECI, PICCS, TSCA

Product Name: CAMCO 4600-15 SC Series Revision Date: 2 January 2014 Page 8 of 8 GHS and other international



| Detail<br>U.S. Regulations | US INVENTORY (TSCA 8b): Listed on inventory.<br>SARA Title III Section 302 Extremely Hazardous Substances (40 CFR Part 355):: This product is not<br>regulated under Section 302 of SARA and 40 CFR Part 355.<br>SARA Title III Sections 311/312 Hazardous Categorization (40 CFR Part 370):: Defined as non-hazardous by<br>OSHA under 29 CFR 1910.1200(d).<br>SARA 313 toxic chemical notification and release reporting: No products were found.<br>CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4):: This material is not regulated under<br>CERCLA Sections 103 and 107. |
|----------------------------|---|
| State<br>Regulations       | No products were found.<br>California prop. 65: No products were found  |

## SECTION 16: OTHER INFORMATION

This product safety data sheet was prepared in compliance Conforms to HazCom 2012/United States. Certain elements refer to Commission Directive 2001/58/EC, 91/155/EEC, 67/548/EEC and 1999/45/EC for reference, as well as their relevant amendments, on the approximation of laws, regulations and administrative provisions relative to the classification, packaging and labeling of dangerous substances and preparations.

<u>History</u>

Date of issue: 2 January 2014

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From

Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

N/D = Not determined, N/A = Not applicable

KEY TO THE RISK CODES CONTAINED IN SECTION 2 AND 3 OF THIS DOCUMENT (for information only):

| Hazardous Material Information System and National Fire Protection Association (U.S.A.) |      |  |      |  |   |                |
|---|------|--|------|--|---|----------------|
| Degree of Hazard  | NFPA |  | HMIS |  |   | HAZARD RATINGS |
| Health  | 0    |  | 0    |  | 0 | Insignificant  |
| Fire  | 1    |  | 1    |  | 1 | Slight         |
| Reactivity  | 0    |  | 0    |  | 2 | Moderate       |
| Personal Protection   |      |  | В    |  | 3 | High           |

The information and recommendations contained herein are, to the best of our knowledge and belief, accurate and reliable as of the date issued. You can contact us to insure that this document is the most current available. The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe-handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, re-publication or retransmission of this document, in whole or in part, is not permitted.