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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME SUNISO 4HT

CHEMICAL NAME Petroleum Hydrocarbon and Additives

CAS REGISTRY NO: INDUSTRIAL SECRETS JAPAN SUN OIL CO., LTD.

Trusty Kojimachi Bldg., 3-4 Kojimachi Chiyoda-ku,

Tokyo 102-0083 JAPAN Tel: +81-3-3238-0235

2. HAZARDS IDENTIFICATION OF THE PRODUCT

GHS Classification

ItemCategoryFlammabilityNot classifiedAcute Toxicity (mouth)Not classifiedAcute Toxicity (skin)Not classifiedAcute Toxicity(inhalation)Not classifiedSkin corrosion/irritationNot classifiedSerious eye damage/eye irritationNot classified

Sensitization (respiratory)

Classification not possible

Sensitization (skin) Not classified Germ Cell Mutagenicity Not classified Not classified Carcinogenicity Reproductive Toxicity Not classified Specific target organ Toxicity (Single) Not classified Specific target organ Toxicity (repeated) Not classified Aspiration hazard Not classified Not classified Short-term(acute) hazardous to the aquatic environment Long-term(chronic) hazardous to the aquatic environment Not classified

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Symbol

NOTHING

Signal Word

NONE

Hazard Statement

NOTHING

3. COMPOSITION/INFORMATION ON INGREDIENTS

This ingredients in this product are on TSCA Inventory and in CAS.

4. FIRST AID MEASURES

EYE -----

Flush with large amounts of water for at least 15 minutes.

If redness or irritation persists, contact a physician.

SKIN -----

Wash with soap and water. Wash clothing before reuse. If irritation or rash develops, obtain medical assistance.

INGESTION -----

Do not induce vomiting!

Call a physician.

INHALATION -----

Move to fresh air.

Keep a victim warm by covering with a blanket and in quiet.

Assist breathing if necessary. Contact a physician.

5. FIRE FIGHTING MEASURES

SPECIFIC HAZARD

--- FLAMMABLE LIMITS IN AIR ---

LOWER EXPLOSIVE LIMIT (LEL) ...: N/D % VOL. UPPER EXPLOSIVE LIMIT (UEL) ...: N/D % VOL.

FLASH POINT > 200°C (COC)

AUTOIGNITION TEMP: N/D

--- NFPA CLASSIFICATION --- ---- HAZARD RATING -----

 HEALTH
 1
 0 LEAST
 3 HIGH

 FIRE
 1
 1 SLIGHT
 4 EXTREME

REACTIVITY - 0 **2 - MODERATE**

FIRE AND EXPLOSION HAZARDS -----

Can be made to burn.

EXTINGUISHING MEDIA -----

Halon Dry Chemical, CO2, Foam, Water Mist or fog.

SPECIAL FIRE FIGHTING INSTRUCTIONS -----

Wear self-contained breathing apparatus. Do not use forced stream as this could cause fire to spread.

6. ACCIDENTAL RELEASE MEASURES

SPILL/LEAK PROCEDURES -----

Stop spill at source if possible without risk. Contain spill. Eliminate sources of ignition. Spill area will be slick. Recover all possible material for reclamation. Use non-flammable absorbent material to pick up remainder of spill.

7. HANDLING AND STORAGE

HANDLING AND STORAGE -----

Keep away from flames, sparks or hot surfaces. Never use a torch to cut or weld on or near container. Empty oil containers can contain explosive vapor.

NFPA Class IIIB storage. Wash thoroughly after handling.

WORK/HYGIENIC PRACTICES -----

Wash hand with soap and water before eating, drinking, smoking or use of toilet facilities. Do not use gasoline, solvent, kerosene, or harsh abrasive skin cleaners for washing exposed skin areas. Take a shower after work if general contact occurs. Remove oil-soaked clothing and launder before reuse.

Launder or discard contaminated shoes and leather gloves.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS -----

5 [mg/m³] mineral oil mist (ACGIH 8 hour TWA)

ENGINEERING CONTROLS -----

Use adequate ventilation to keep oil mists of this material below applicable standard(s). See section on occupational exposure limits

EYE/FACE PROTECTION -----

Safety glasses or splash goggles. Have suitable eye wash water available.

SKIN PROTECTION -----

Avoid prolonged and/or repeated skin contact. If prolonged contact cannot be avoided, wear protective impervious gloves and clothing.

Acceptable materials for gloves are polyvinyl chloride; neoprene; nitrile; polyvinyl alcohol; viton.

RESPIRATORY PROTECTION -----

Normally not required if adequate ventilation.

NIOSH/MSHA approved apparatus

OTHER/GENERAL PROTECTION -----

If there is a likelihood of splashing, an oil resistant clothing should be worn. Never wear oil soaked clothing. Launder or dry clean before wearing. Discard oil soaked shoes.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: Wide Range

MELTING POINT: N/A SPECIFIC GRAVITY 0.86 PACKING DENSITY N/A

VAPOR PRESSURE < 0.03 ([Pa] at 25°C)

VAPOR DENSITY: > 10 (AIR=1)

SECTION 9 (CONT'D)

APPEARANCE Light Yellow Liquid

ODOR Slight Odor

ODOR THRESHOLD N/D

10. STABILITY AND REACTIVITY

STABILITY -----

Stable

CONDITIONS TO AVOID (STABILITY) -----

Sources of ignition.

INCOMPATIBLE MATERIALS -----

Strong oxidizing agents such as chromic acid, hydrogen peroxide and bromine.

HAZARDOUS DECOMPOSITION PRODUCTS -----

Upon combustion, CO₂ and CO are generated.

HAZARDOUS POLYMERIZATION -- ------

Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY -----

LD₅₀ (oral, rat) expected to be >5000 mg/kg (not classified as harmful).

LC₅₀ (inhalation, rat) expected to be ca. 5.00 mg/l. LD₅₀ (dermal, rabbit) expected to be >2000 mg/kg (not classified as harmful).

SKIN CORRSION/IRRITATION -----

Not classified as a skin irritant (rabbit test)..

SERIOUS EYE DAMAGE/IRRITATION -----

Not classified as an eye irritant (rabbit test).

RESPIRAATORY or SKIN SENSITISATION -----

No data available concerning respiratory sensitisation.

Not classified as a skin sensitiser (Buehler test; guinea pig).

GERM CELL MUTAGENICITY -----

The mutagenic potential of the product category 'other lubricant base oils' has been extensively studied in a range of *in vivo* and *in vitro* assays. The majority of the studies showed no evidence of mutagenic activity. Based on the available data, these oils are not considered to be germ cell mutagens.

CARCINOGENICITY -----

Based on findings in animals following dermal exposure, 'sufficiently refined' (DMSO extract <3% by method IP346) 'other lubricant base oils' are not carcinogenic.

REPRODUCTIVE TOXICITY -----

Results of developmental and reproductive toxicity studies on 'sufficiently refined' (DMSO extract <3% by method IP346) 'other lubricant base oils' show no evidence of developmental or reproductive toxicity in rats..

STOT-SINGLE EXPOSURE -----

Acute studies do not indicate any specific organ toxicity following single exposure.

STOT- REPEATED EXPOSURE -----

The repeat dose toxicity of 'other lubricant base oils' has been investigated by dermal and inhalation routes for periods between 4 weeks and up to 2 years. 'Sufficiently refined' (DMSO extract <3% by method IP346) 'other lubricant base oils' showed no systemic effects.

ASPIRATION HAZARD -----

Not classified on the basis that the kinematic viscosity is > 20.5 mm²/s at 40 °C.

12. ECOLOGICAL INFORMATION

TOXICITY -----

In a static acute limit test, fathead minnow were exposed to the Water Accommodated Fraction (WAF) of a similar substance to the product at a nominal concentration of 100 mg/L: LL₅₀ (fish, 96 h), >100 mg/l; NOEL (fish, 14 d) ≥100 mg/l.

In a static Daphnia magna test, animals were exposed to the WAF of a similar substance to the product at nominal concentrations of up to 10 000 mg/L: EL₅₀ (48 h) and NOEL were greater than 10 000 mg/L. Thus, the similar base oil WAF is generally non-toxic. In a semi-static, long-term Daphnia magna reproductive test, animals were exposed to the WAF of a similar substance to the product at nominal concentrations of up to 1000 mg/L: the NOEL (Daphnia magna, 21 d) was 10 mg/L based on effects to reproduction. In an algal toxicity study, *Pseudokirchneriella subcapitate* was exposed to a similar substance to the product at a nominal concentration of 100 mg/L WAF loading rate under static conditions: NOEL was found to be ≥100 mg/L based on average specific growth rate and cell yield. In a static 4-day microorganism luminescence inhibition study using other lubricant base oils as control substances, no significant luminescence inhibition was observed.Advise authorities if product has entered or may enter watercourses or sewer drains.

PERISISTENCE and DEGRADABILITY ------

Another lubricant base oil was determined to be inherently biodegradable but not readily biodegradable, with a mean degradation of 31% by day 28.

BIOACCUMULATIVE POTENTIAL -----

The bioconcentration values estimated for components of lubricating oils suggest some bioaccumulation potential for some components.

MOBILITY IN SOIL -----

Lubricating oils components have estimated log $K_{oc} > 3$, indicating these components are likely to be adsorbed onto soil and sediment and are not likely to leach to ground water.

OTHER ADVERSE EFFECTS -----

The product is water-insoluble and oil-based, and may form a sheen on water

13. DISPOSAL CONSIDERATIONS

SPILL, LEAK OR RELEASE -----

Stop leak, dike up large spills. Use inert absorbent material such as earth, sand, or vermiculite for clean-up.

WASTE DISPOSAL METHOD -----

Dispose of in accordance with Local, State, and Federal government regulations.

14. TRANSPORT INFORMATION

Proper Shipping Name : Not regulated by DOT (Contains oil)

Hazard Class : Not Applicable DOT ID No. : Not Applicable

DOT Shipping Label : Not regulated by DOT

Usual Shipping Containers : Rail cars, Tank truck, Drums.

Transport Temperature Deg.C : Ambient to max 60 °C

15. REGULATORY INFORMATION

U.S.FEDERAL REGULATORY INFORMATION -----

SARA 302 Threshold Planning Quantity : N/A SARA 304 Reportable Quantity : N/A

SARA 311 Categories : Immediate (Acute) Health Effects -- No

Delayed (Chronic) Health Effects -- No Fire Hazard -- No Sudden Release of pressure Hazard -- No Reactivity Hazard -- No

Comprehensive Environmental Response, Compensation and liability Act (CERCLA) ------

No chemicals in this product are subject to the reporting requirements of CERCLA.

EUROPEAN (EU) FEDERAL REGULATORY INFORMATION -----

The ingredients in this product are listed on the European Inventory of Existing Commercial Substances.

The base oil has an IP-346 value of <3%.

16. OTHER INFORMATION

DISCLAIMER -----

The information contained herein is based upon data believed to be reliable and reflects our best professional judgment.

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein and assume no responsibility regarding the suitability of this information for the user's intended purpose or for the consequence of its use.

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