

MAX TECH 15W-40

Product name: MAX TECH SAE 15W-40

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

Name of the product : MAX TECH 15W-40

Product application : SEMI SYNTHETIC Engine Lubricant

Supplier : Hydrosyn Corporation Co., Ltd.
212/161 Tamru-Bangplee Rd. T.Phraek Sa Mai A.Mueang Samutprakarn 10280
Tel: 662-183 8698 Fax: 662-183 8678

2. HAZARDS IDENTIFICATION

This material is not considered to be hazardous according to regulatory guidelines

Health effects : Low order of toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High –pressure injection under skin may cause serious damage.

Environmental impact : Experiments with similar products indicate no serious harmful effects on aquatic or land-living organisms and intrinsic biodegradability. However, the discharge of this product into the environment is prohibited by law.

Physico-chemical hazards : No specific risk of fire or explosion.

Product classification : None according to the Directive 67/548/EC modified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components		Exposure Limits (ACGIH)		
Name	CAS #	%	TLV-TWA (8H)	STEL
Distillate , Solvent-refined	64741-88-4	82.0-84.0	5 mg/m ³	10 mg/m ³
Additive package	n/a	16.0-18.0	5 mg/m ³	10 mg/m ³

4. FIRST AID MEASURES

General : IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CONSULT A DOCTOR OR CALL FOR EMERGENCY MEDICAL AID.

Inhalation : In case of exposure to intense concentrations of vapor, fumes or spray, transport

	The person away from the contaminated zone, keep warm allow to rest. - Symptoms: Irritation of the respiratory system. At high concentrations: Narcosis.
Ingestion :	Do not induce vomiting. Generally no special treatment is necessary - Symptoms: Nausea, vomiting, abdominal pains.
Skin contact :	Wash immediately with plenty of water. If the skin is exposed to high-pressure spray, the product may enter the human body. In all such cases the affected person must be taken to hospital, even if no sign of injury can be detected. In case of repeated or prolonged contact with the skin: Dryness. Chapping. Skin irritation.
Eye contact :	Wash immediately in copious amounts of water, keeping eyelids apart for at least 15 minutes and consult a specialist. - Symptoms: Burning feeling and temporary redness.

5. FIRE FIGHTING MEASURES

Flash point:	see heading 9 - "Physical and chemical properties"
Extinguishing media :	- Suitable: Foam, CO ₂ , powder - Not recommended: Water jet.
Specific hazards :	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled.
Protective measures for firefighters:	Insulated breathing apparatus must be worn in confined premises with heavy concentrations of fumes and gases.
Other :	All combustion residues and contaminated water from fire-fighting should be disposed of according to local regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal protection :	Ensure good ventilation. Depending on exposure hazards, wear gloves, goggles, boots or hydrocarbon-proof clothing. Spills of this product can make surfaces slippery.
After spillage / leakage :	Stop the leak by turning off the valve. Contain the spilled product. Do not allow the product to enter sewers or rivers or contaminate the soil. Contact the competent authorities if the situation cannot be brought under control rapidly and efficiently.
Spill cleanup methods :	- Recovery: Contain and collect the spilled product with sand or any other inert absorbent material. Preserve the waste in closed and sealed recipients. - Elimination: Hand over contaminated materials to an approved collector. Rinse by flooding the surface with water.
Prevention of secondary risks :	Remove all sources of ignition.

7. HANDLING AND STORAGE

HANDLING :

Prevention of user exposure : Ventilate extensively if the formation of vapors, fumes, mists or aerosol is a risk. Keep away from combustible substances; keep away from food and beverages.

Prevention of fire and explosion : Empty containers may contain flammable or explosive vapors. There is a fire hazard associated with rags, paper or any other material used to remove spills which become soaked with product. Avoid accumulation of these: they are to be disposed of safely after use.

Precautions : Avoid extended and repeated contact with the skin as this may cause skin conditions, which may also be aggravated by minor injuries or by contact with soiled clothing. Avoid breathing in vapors, fumes or mists.

STORAGE :

Technical measures : Make the necessary arrangements to prevent water and soil pollution.

Storage precautions :
 - Suitable: Store at ambient temperature, protected against contact with water and moisture, and away from any source of ignition.
 - To be avoided: Do not store exposed to the elements.

Incompatible products : Dangerous reaction with strong oxidizing agents.

Packaging materials : Keep in original container if possible. Recommended: Steel, stainless steel

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

The personal protective equipment (PPE) recommendations apply to the product ITSELF.

Technical measures: Use the product in a properly ventilated atmosphere.

Occupational exposure limit : For exposure to oil mist, a mean exposure value of 5 mg/m³ is recommended (TLV-TWA).

Respiratory protection: In case of risk of exposure exceeding the mean exposure value, an appropriate breathing apparatus must be worn by each individual.
 In case of vapors or sprays formation: Combined gas cartridge (organic gases and dust, filter A/P2). Be aware that filter protection time is limited.

Hand protection: Liquid proof aliphatic solvent resisting gloves:
 Recommended materials:
 - In case of splashes or limited contact:
 Polychloroprene. Thickness >0.7 mm - Permeation time according to EN 374-3: >60 minutes
 Nitrile. Thickness >0.3 mm Permeation time according to EN 374-3: > 480 minutes
 Fluoro polymer and PVA – any thickness. Permeation time according to EN 374-3: > 480 minutes
 For more precise details about the choice of appropriate protective glove, please contact the manufacturer.

Eye protection: Goggles, in case of risk of splashing.

Skin and body (other than the As required, wear a face mask, hydrocarbon-proof clothing, and safety boots (when

hands) protection : handling drums).

Hygienic work practices : Avoid prolonged and repeated contact with the skin.

9. PHYSICAL AND CHEMICAL PROPERTIES

<u>Product</u>	<u>CF-4/SG</u>
<u>SAE</u>	15W40
Physical State	Liquid
Specific gravity	0.8746
Auto ignition temp, °C	N/A
Initial boiling Point, °C	> 315
Vapor pressure, mmHg @20 °C	< 0.1
Evaporation Rate @ 1ATM and 25 °C(77 °F)	< 0.1
(n-Butyl Acetate=1)	
Solubility in Water @ 1ATM and 25 °C(77 °C), %	< 0.1
Solubility in organic solvent	Soluble

10. STABILITY AND REACTIVITY

Stability : The product is stable at normal storage, handling and use temperatures.

Conditions to avoid : Heat, sparks, ignition points, flames, static electricity.

Materials to avoid : Strong oxidizing agents like hydrogen peroxide.

Hazardous decomposition products: Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

11. TOXICOLOGICAL INFORMATION

The components of this product do not present a danger of acute intoxication Acute toxicity / Local effect :

Inhalation, comments:	Not classified according to the criteria of classification in force. Strong concentrations of vapor and spray may be irritating for the respiratory tract and mucous membranes.
Skin contact :	LD50 (Rabbit) > 2000 mg/kg
Skin contact, comments:	Not classified. However, avoid prolonged contact, which can lead to localized irritation.
Ingestion :	LD50 (Rat) 2000 mg/kg
Ingestion, comments :	Not classified.
CHRONIC TOXICITY OR LONG-TERM TOXICITY :	
Inhalation :	Vapor and spray may be irritating for the respiratory tract and for mucous membranes
Skin contact :	Characteristic skin affections (oil blisters) may develop following prolonged and repeated exposure through contact with stained clothing
Carcinogenicity :	PCA (polycyclic aromatics) content : < 3% (IP 346 method) OSHA, NTP, IARC : Based on the IARC monograph, this oil, which is mild solvent refined and then mild hydro-treated, is not considered as being carcinogenic. This product is not regarded as carcinogenic.

12. ECOLOGICAL INFORMATION

Eco toxicity :	Acute toxicity. LC50 fish > 1000 mg/kg
Comments about eco toxicity :	The virgin product is considered to present no danger for land-growing organisms. It is considered to present a little danger for aquatic life.
Mobility :	- Soil: Given its physical and chemical characteristics, the product generally shows little mobility in the ground. - Water: The product is insoluble; it spreads on the surface of the water.

13. DISPOSAL CONSIDERATIONS

Waste disposal :	The regulations prohibit the discharge of oils and lubricants in the environment. - Relevant disposal method: The only suitable method is incineration at an approved installation.
Disposal of contaminated packaging:	- Relevant disposal method: Disposal via an authorised waste contractor. Proceed in compliance with the prevailing regulations.

14. TRANSPORT INFORMATION

The description shown may not apply to all shipping situation. Consult 49 CFR or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

TC Shipping Description: Not regulated as dangerous for transportation under TDG regulations

IMO/IMDG Shipping Description: Petroleum Lubricating Oil; Not regulated as dangerous for transportation under the IMDG Code

ICAO/IATA Shipping Description: Petroleum Lubricating Oil; Not regulated as dangerous for transportation under ICAO

DOT Shipping Description: Petroleum Lubricating Oil; Not regulated as dangerous for transportation under 49 CFR

Additional Information: Not Hazardous by U.S.DOT
ADR/RID Hazard class not applicable
UN Number: Not regulated

15. REGULATORY INFORMATION

EU Labelling/ Classification

Symbol (S): None
R phrases: None
S phrases: None

Other regulations:

- HMIS (USA):

Health	Flammability	Reactivity
1	1	0

- NEPA (USA):

Health	Flammability	Reactivity
1	1	0

16. OTHER INFORMATION

N/A = Not Applicable

Recommended uses and restriction on use: see section 1

The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Develop by QD-B