

# SYF-990 SYNTHETIC CHAIN OIL

Suitable for incidental food contact (NSF Certified, Category H1)

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## Product Description

SYF-990 SYNTHETIC CHAIN OIL Food Grade Lubricant is a high temperature lubricant which has been specifically formulated with synthetic base stocks having unusually high temperature lubricating capability. The product is approved by NSF International as H1 grade Lubricant. The product meets requirements of USDA H1\* 21 CFR. (Registered by NSF (Class H1) for use where there is potential for incidental contact with food. These products meet the former guidelines (1998) of the US Department of Agriculture Food Safety and Inspection Service (USDA FSIS) for H1 use (lubricant with incidental food contact) and listed in Miscellaneous Publication No 1419 "List of Proprietary Substances and Nonfood Compounds". Product contains only substances permitted under US 21 CFR 178.3570, 178.3620 and 182 for use in lubricants with incidental food contact.)

SYF-990 Synthetic Chain Oil Careful selection of additives result in a fluid which resists high temperature decomposition and prevents the formation of sludge or carbon normally produced by petroleum based products. This results in longer equipment life, less maintenance, better efficiency, while costly downtime is significantly reduced.

## Features & Benefits

- Excellent high temperature oxidation resistance.
- Superior thermal stability for prolonged lubricant life.
- Extremely low volatility/less lubricant consumption.
- Outstanding anti-wear properties/reduced chain drag.

They do not contain any natural products derived from animals, nuts or genetically modified organisms (GMOs). It is

Suitable for use where vegetarian and nut-free food is prepared and do not promote the growth of bacteria or fungal organisms.

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### PETRELPLUS INC.

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mail-marketing@petrelplus.com, [www.petrelplus.com](http://www.petrelplus.com)

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## Technical Data

PROPERTIES	Test Method	15	32	180	220	320	460
Specific Gravity	ASTM D1296	0.82	0.95	0.95	0.95	0.95	0.95
Flash Point °C	ASTM D92	216	>240	>290	>290	>290	>290
Viscosity @ 40 °C CST	ASTM D45	18	32	180	220	320	460
Viscosity @ 100 °C CST	ASTM D45	4.0	6.1	19.6	23.3	29.6	48
Pour Point. °C	ASTM D97	-60	-55	-28	-10	-10	-10

### THERMAL STABILITY OF SYF-990 SYNTHETIC CHAIN OIL V/S A COMPETITIVE SYNTHETIC CHAIN LUBRICANT

	COMPETITIVE SYNTHETIC CHAIN LUBRICANT	SYF-990 SYNTHETIC CHAIN OIL
Viscosity increase, 210 ° F.(98.9 ° C) %	+ 6.40	+ 2.59
Wt. Loss, %	- 4.67	- 0.98

Test samples maintained at 300 ° C. (140 ° C.) for 48 hrs.

### THERMOGRAVIMETRIC EVALUATION OF SYF-990 CHAIN OIL V/S COMPETITIVE SYNTHETIC CHAIN OIL

Temperature, ° C (° F) @	COMPETITIVE SYNTHETIC CHAIN LUBRICANT	SYF-990 SYNTHETIC CHAIN OIL
10% sample weight loss	280 (536)	320 (608)
50% sample weight loss	325 (617)	365 (689)
90% sample weight loss	345 (653)	385 (725)

Test sample temperatures were increased at a rate of 10 ° C. (50 ° F)/min. in a nitrogen atmosphere

Available Packs: 1, 5, 20, 50, 210 Ltr.

Shelf Life: 36 Months from the manufacturing month.

Due to continual product research and development, the information contained herein is subject to change without notification. Typical Properties may vary slightly.

The Material Safety Data Sheet (MSDS) are available upon request through our sales office.

\*All related specifications are meets or exceeds.

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## 1. IDENTIFICATION

PRODUCT: - SYF-990/ SYNTHETIC CHAIN OIL  
(SYNTHETIC FOOD GRADE LUBRICANT NSF  
Certified, Category H1)

**Supplier:** - Petrel plus Inc.

One World Center, Tower One, 9<sup>th</sup> Floor,  
Senapati Bapat Marg, Lower Parel,  
Mumbai-400013, Maharashtra.

Call # +91 22 6216 7072 (Monday to Friday)

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marketing@petrelplus.com www.petrelplus.com

## 2. COMPOSITION

Synthetic Ester Base Oil, Proprietary additives

## 3. HAZARDS IDENTIFICATION

Not classified as hazardous. Other Hazards:

## 4. FIRST-AID MEASURES

### RESPIRATORY SYSTEM

Remove to fresh air and get medical attention.

### INGESTION

Do not induce vomiting. Wash mouth out with water  
and obtain medical attention.

### EYES

Rinse immediately with plenty of water for at least  
10 minutes. Get Medical Attention.

### SKIN

Remove contaminated clothing. Wash affected area  
with soap and water, get medical attention.

## 5. FIRE-FIGHTING METHODS

Foam, carbon dioxide or dry power.

## 6. ACCIDENTAL RELEASE MEASURES

Contain and absorb in sand or earth. Ensure no  
material enters drains or water courses. Dispose of

as solid waste in accordance With the relevant  
waste disposal regulations.

## 7. STORAGE AND HANDLING

### Storage

Store in delivery packs in a cool dry place.

### HANDLING

At ambient temperatures wear gloves overalls and  
eye protection. The work area should be adequately  
ventilated. No eating drinking or smoking in the  
work area.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

### Exposure Standard:

The substance with exposure limit is: Notation 1:

Exposure Standard: 2nd substance with exposure  
limit is: Notation 2:

### PERSONAL PROTECTION

#### Respiratory Protection:

Type of Cartridge (if Applicable): Eye Protection:

Safety Spectacles Hand Protection: Gloves butyl or  
nitrile rubber

Industrial Hygiene: No eating drinking or smoking  
in the work area

Ventilation: At room temperature handle in a well-  
ventilated area. Use exhaust ventilation if exposure  
to flume or aerosol can occur.

### PROTECTION AGAINST FIRE AND EXPLOSION

Combustible but not readily ignited. No explosion  
hazard.

### EC SAFETY PHRASES

Not classified as hazardous

#### 9. TYPICAL PROPERTIES:

Viscosity @ 40 °C CST 18 to 460  
Flash Point °C >290  
Specific Gravity 0.82 To 0.95

#### 10. STABILITY AND REACTIVITY

##### HAZARDOUS REACTIONS

Comments

##### HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition produces noxious fumes.

#### 11. TOXICOLOGICAL INFORMATION

LD50 Acute Oral Toxicity: > 5000:mg/Kg:Rat LC50  
Acute Inhalation: :mg/1:  
Eye Irritation: No: Rabbit Skin Irritation: No.: Rabbit  
Sensation: Further Information:

#### 12. ECOLOGICAL INFORMATION

LC50 (96 Hour): mg/1 EC50 (24 Hour): mg/1  
Biodegradability (Coupled units):

#### 13. DISPOSAL CONSIDERATIONS

Solid material should be incinerated. Material  
absorbed on sand should be disposed of as solid  
waste.

#### 14. TRANSPORT INFOMRATION

IMDG No.: Not classified  
Packing Groups: IATA-DGR Class No.: Not classified  
TREM CARD: Not classified RID/ADR Class No.: Not  
classified Other Information

#### 15. REGULATORY INFORMATION

Classification and labeling according to EC Directives  
67/548 Not classified as hazardous. EC Risk Phrases  
Not classified as hazardous. Other Hazardous EC  
Safety Phrases  
Not classified as hazardous

#### 16. OTHER INFORMATION: PRODUCT SAFETY

For safety reasons, it is IMPERATIVE that customer: -  
Ensure that all those within their control who use the  
products are supplied with all relevant information  
contained within the Material Safety Data Sheet and  
Technical Bulletin concerning the applications for  
which the product is designed and any instructions  
or warning

##### DISCLAIMER/USER'S RESPONSIBILITY:

PETRELPLUS INC. Provides the information  
contained herein in good faith but makes no  
representation as to its comprehensiveness or  
accuracy. This document is intended only as a guide  
to the appropriate precautionary handling of the  
material by a properly trained person using this  
product. Individuals receiving the information must  
exercise their independent judgment in determining  
its appropriate use. The Material Safety Data Sheet  
and Technical Bulletin concerning the applications  
for which the product is designed and any  
instructions or warning and substance with exposure  
limit is: Notation 2: