



# SYF-990/ LT-VG-2

FOOD GRADE LOW TEMPERATURE VISCOSITY GRADE-2

## Product Description

SYF-990/ LT-VG-2 Synthetic Food Grade Lubricant are a range of non-toxic, mineral hydrocarbon free special low viscosity lubricant application where indirect heat transfer which control temperature conditions, and it can be used where very low temperature arise from -94 °C to190°C.

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.)

## Applications

- For the fixing of rubber seal & plastic parts, where temperature goes very low.
- It can be used in process Heating & Cooling systems in the pharmaceutical and fine chemicals.

## Benefits

- Equally efficient for heating and cooling applications.
- Excellent protection against Corrosion.
- Compatible with rubbers & plastics.
- Long fluid lifetime, lowering maintenance cost.
- Free of nitrite, borax and CMR (carcinogenic, mutagenic, and reprotoxic).
- No risk of two different nature liquid mix.

## Non- Toxic

SYF-990/LT-VG-2 has distinct advantages over many heat transfer fluids. It contains no components recognized as Hazardous Chemicals under OSHA Hazard Communication Standard. There are no Reportable Substances under SARA Title III (302) (304) (311) (312) (313). The fluid does not normally cause skin irritation on contact. Vapors may have a mild odor but do not normally cause respiratory irritation. All these advantages combine to provide a safe, user-friendly alternative.

**PETRELPLUS INC.**

One World Center, Tower One, 9<sup>th</sup> Floor, Senapati Bapat Marg, Lower Parel, Mumbai-400013  
mail-marketing@petrelplus.com, [www.petrelplus.com](http://www.petrelplus.com)

☎ +91 93522 25457 +91 95098 25457 

## Typical Properties

Characteristics	Test Methods	Values
Composition		Synthetic Hydrocarbon
Kinematic Viscosity		
@ 40°C	ASTM D445	1.22 cSt
@ -50°C	ASTM D445	14.8 cSt
@ 100°C	ASTM D445	0.64 cSt
Pumpability		
@ 300 mm <sup>2</sup> /s (cSt)		<-80 °C
@ 2000 mm <sup>2</sup> /s (cSt)		<-94 °C
Recommended Bulk Temperature		-94 °C to 230 °C
Maximum Film Temperature		246 °C
Initial Boiling Point		192°C
Auto Ignition Temperature	DIN 51794	>277 °C
Flash Point	ASTM D93	>62 °C
Total Acid No.	ASTM D664	< 0.05 mg KOH/g
Water Content	ASTM E203	<75ppm
Density @ 40°C	ASTM D4052	740 Kg/ m <sup>3</sup>
Dielectric Constant	ASTM D924	2
Coefficient Thermal Expansion@ 100 °C		0.0012/°C/Ltr
Copper Strip Corrosion@ 100 °C for 24 Hrs.	ASTM D130	<1A
Average Molecular Weight		162

**Available Packs: 1, 20, 50 and 210 Litres.**

**Shelf Life - 36 Months from the manufacturing month.**

\*All related specifications meet or exceed.

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.

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product** SYF 990/LT-VG-2  
**Supplier** PETRELPLUS 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)  
Cell # +91 93522 25457  
[marketing@petrelplus.com](mailto:marketing@petrelplus.com)  
[www.petrelplus.com](http://www.petrelplus.com)

## 2. COMPOSITION

Synthetic Hydrocarbon and Proprietary additives.

## 3. HAZARDS IDENTIFICATION

Not classified as hazardous.

## 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 MEASURE

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

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	- 1.22
Flash Point, COC, °C	- >62
Maximum Film Temperature, °C	- 246
Initial Boiling Point, °C	-192

**10. STABILITY AND REACTIVITY**

Stability	- Stable
Conditions to avoid	- Excessive temperatures
Materials to avoid	- Strong oxidizers
Hazardous decomposition products	- Oxides of carbon and nitrogen

**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: No:  
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 INFORMATION**

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.