

# SYF - 1020

COMPRESSOR POLYGLYCOL LUBRICANT

## Product Description

SYF-1020 is a high-performance synthetic gas compressor lubricant based on a polyglycol Lubricant. It is designed for enclosed pattern gas compressors for hydrocarbon and chemical gases where the crankcase and bearings operate in a gas-filled atmosphere. Under these conditions the gas is readily soluble in mineral oil lubricants which, on dilution, suffer a significant drop in viscosity and lubricant performance. This problem can be overcome by using SYF-1020 in which the gases are much less soluble. SYF-1020 is particularly suitable for marine service on vessels carrying specialist liquefied gas cargoes

SYF-1020 has very high viscosity indices and, being wax-free, they have extremely low pour points. Their coefficients of friction and traction (for example, in non-conforming gear or bearing contacts) are lower than for mineral oils. These exceptional lubricity characteristics help deliver lower operating temperatures in many applications. It is recommended for use by major plastic calendar, paper machine bearing, compressor and gear manufacturers, and is the products of choice for many severe service applications.

## Advantages

1. Reduced gas solubility leading to improved wear protection, extended lubricant life, improved compressor efficiency and Reduced foaming.
2. Multi gas service for a wide range of gases including vinyl chloride and butadiene. The lubricant does not promote the dimerization of butadiene or generate solid deposits.

3. Helps to lower operating temperature, increasing charge life.
4. Reduced gear tooth wear at high temperatures for both steel-on-steel and steel-on-bronze metallurgies.

SYF-1020 therefore obviates the need to change to mineral oil for butadiene compression, thus simplifying the lubricant inventory, avoiding mistakes and saving time and expense.

## Applications

SYF-1020 lubricant is recommended for the most severe conditions in all types of plain and anti-friction bearings and industrial enclosed gears up to a bulk oil temperature of 200°C. Specific applications include:

- Severe plastic calendar operations
- High temperature paper machine bearings
- Industrial enclosed gears – spur, bevel and worm gearing
- Reciprocating and rotary air compressors
- SYF-1020 suitable for oil flooded rotary screw compressors compressing natural gas, field gathering gas, CO<sub>2</sub> and other process gasses used in the natural gas industry.

**Available Packs: 5, 20, 50, 210 Litres**

**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 met or exceed

**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

SYF-1020	Values
ISO Viscosity Grade	220
Kinematic Viscosity, ASTM D 445	
cSt @ 40°C	224
cSt @ 100°C	30.9
Pour Point, °C, ASTM D 97	-41
Flash Point, °C, ASTM D 92	221
Specific Gravity @20 °C, ASTM D 1298	1.006
Copper Strip Corrosion, ASTM D 130, 24 hr at 100°C	1B
Rust Protection, ASTM D 665, Distilled Water	Pass
Foam Test, ASTM D 892, Seq I Tendency/stability, ml/ml	5/0
4-Ball Wear, ASTM D 4172, Scar, mm	0.4
FZG Gear test, DIN 51534 (Mod), Failure Stage	12+

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product** SYF-1020 COMPRESSOR POLYGLYCOL (PAG) OIL

**Supplier** **Petrelplus Inc.** One World Center,  
Tower One, 9<sup>TH</sup> Floor, Senapati  
Bapat Marg, Lower Parel,  
Mumbai-400013, Maharashtra.  
(Monday to Friday)  
Cell # +91 93522 25457  
[marketing@petrelplus.com](mailto:marketing@petrelplus.com)  
[www.petrelplus.com](http://www.petrelplus.com)

## 2. COMPOSITION

PAG (polyoxyalkylene glycol), 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

Storage 1: 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

Kinematic viscosity cSt @ 40°C	224
Kinematic viscosity cSt @ 100°C	30.9
Flash Point, °C	221

## 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: 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

TREMCARD: 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.