

# **Technical Data Sheet**







# SYF - 1320

Synthetic PAG Gear Oil

# **Product Description**

SYF-1320 GEAR OILS are fully formulated synthetic lubricants specially designed for use in highly rated worm gear units. They have an extremely high viscosity index, low pour points and high load carrying capacities, and show exceptionally low coefficients of friction. Additives are incorporated to reinforce the stability of these oils, their resistance to corrosion and their resistance to scuffing under unfavorable operating conditions. These oils are capable of extremely long service

# **Features and Benefits**

SYF-1320 GEAR OILS being POLYGLYCOL, and not mineral oil based exhibits inherently superior particularly with respect outstanding thermal stability and lubricants performance. These properties are particularly useful in heavily loaded mechanisms operating at elevated temperatures e.g. worm gears and calendar bearings.

- Reduced power consumption arising from easier starting, faster warm-up and lower coefficient of friction.
- Inherently higher viscosity index plus low pour point enable equipment of operate over a wider range of service temperature.
- Higher thermal stability, minimal sludge and deposit formation.
- Improved load-carrying properties and

reduced wear.

Reduced frictional losses, leading to lower sump temperatures and higher gear efficiency.

# **Application**

SYF-1320 GEAR OILS suitable for heavy duty automotive and industrial gear boxes with sump temperature up to 140° C. The product performance allows for extended drain intervals and even. The specially developed polyglycol-additive technology of the new SYF-1320 GEAR OILS -220/B and 220/C allows thermal stable operation at temperatures in excess of 200°C. These products are therefore preferred for the lubrication of gears and bearings operating at elevated temperatures, e.g. in calendar equipment.

RECOMMENDED FOR USE IN ALL HEAVILY LOADED AND TEMPERATURE GEARS

# **Typical Properties**

PROPERTIES	A	В	С	D	Е	F	G	
TROTERTIES	32	68	140	150	220	320	460	TESTMETHOD
ViscosityCstat40°C	35	67	140	152	236	322	46 1	ASTMD445
ViscosityCstat100°C	6	8	25.5	28	37	52	67	ASTMD445
Relativedensity20/20°C	0.94	0.96	1	1	1.02	1.02	1.0 17	ASTMD1298
ViscosityIndex	150	148	235	240	240	240	25 0	ASTMD2270
Flashpoint°C	220	230	240	260	290	288	28 6	ASTMD92
Pour point°C	-45	-45	-45	-42	-40	-35	-33	ASTMD97
NeutralizationValue(mg KOH/g)	0.4	0.5	0.5	0.6	1.07	1.1	1.1	ASTMD664
	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
FZG TestConditionsA/8.3/9 0	Stage 12	Stage 12	Stage 12	Stage1 2	Stage 12	Stage12	Stage12	IP 334
	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
A/16.6/140	Stage 12	Stage 12	Stage 12	Stage1 2	Stage 12	Stage12	Stage12	IP 334
Corrosion- CopperstripClassificatio n	1	1	1	1	1	1	1	ASTMD130
Corrosion- Rustprevention	Pass	Pass	Pass	Pass	Pass	Pass	Pass	ASTMD665A
Foamtendency/stability ,Sequence 1	10/ 0	10/ 0	10/0	10/0	10/0	10/0	10/0	ASTMD892
Sequence2	10/ 0	10/ 0	10/0	10/0	10/0	10/0	10/0	ASTMD892
Sequence3	10/0	10/0	10/0	10/0	10/0	10/0	10/0	ASTMD892

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

# Shelf Life: 36 Months from 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.

# MATERIAL SAFETYDATA SHEET

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product SYF-1320 SYNTHETIC PAG GEAR OIL

**SERIES** 

Supplier Petrelplus Inc.

One World Center, Tower One,9th Floor,

SenapatiBapatMarg, Lower Parel, Mumbai-400013, Maharashtra. Call # +91 22 6216 7072

(Monday to Friday) Cell # +91 93522 25457 marketing@petrelplus.com www.petrelplus.com

#### COMPOSITION

Polyglycol Base Oil, Proprietary additives

## HAZARDS INDENTIFICATION

Not classified as hazardous. Other Hazards: None

## FIRST-AID MEASURES

RESPIRATORY SYSTEM

Remove to fresh air and get medical attention.

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

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

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

# FIRE-FIGHTING METHODS

Foam, carbon dioxide or dry power.

# 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.

# 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.

# **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.

## **TYPICALPROPERTIES:**

Viscosity, ASTM D 445 cSt @ 40º C 35 TO 460 cSt @ 100º C 6 TO 67 Flash Point, <sup>o</sup>C, ASTM D 92 220 MIN

#### 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:

Eve 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 INFOMRATION

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.