

SYF-990/GEARPLUS FG FOOD GRADE SYNTHETIC (PAG) GEAR OIL



Product Description

Fully synthetic Food Grade Polyalkylene Glycol Gear oil, bearings and compressor for the lubrication of all closed toothed gears, liquid lubrication of chains, hinges, guides, armatures,roller and plain bearings in the whole food and beverage industry as well as in breweries, when physiologically harmless lubricants are required. This product has excellent extreme pressure performance, and heavily loaded toothing against Micro pitting

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 List of Proprietary Substances and Nonfood Compounds". Product contains only substances permitted under US 21 CFR 178.3570, for use in lubricants with incidental food contact.

Method of Application

For optimum effect clean thoroughly the lubrication points first mechanically and then, before initial filling of gears removes corrosion protection agent. Fill gear so that the dipping teeth receive lubricant for sure. Apply sufficient amount with a brush, dripping oiler, by dipping or central lubricating systems. Instructions of the gear and machine manufacturer have to be observed. Relubrication intervals and amount to be defined accordingly, to the service conditions.

Benefits

- Excellent protection against Micro pitting.
- High Thermal stability.
- Excellent Protection against rust and corrosion.
- Compatible with all the common Gearbox Materials of construction.
- Outstanding Filter life.



Performance Standard:

• DIN 51517 PART-3, US STEEL 224.

Typical Properties

PROPERTIES	Test Method	Value	Value	Value	Value	Value
Classification	DIN 51 502/825	VG 150	VG 220	VG 320	VG 460	VG 680
Туре		PAG	PAG	PAG	PAG	PAG
Viscosity @ 40°C Mm2/s 100°C Mm2/s	DIN 51 562-1 DIN 51 562-1	150 14.7	220 20	320 25	460 31	680 43
Viscosity Index	DIN ISO 2909	150	150	150	150	150
Pour point °C	DIN ISO 3016	<-18	< -16	<-15	<-12	<-10
Flash point °C	DIN ISO 2592	244	> 250	255	260	265
Density g/ml 29.5 °C	DIN EN ISO 3838	.893	0,898	.900	.910	.925
Density @ 15.6 C, g/cm3,	ASTM D4052	1.078	1.077	1.077	1.076	1.076
Color		Yellowish	Yellowish	Yellowish	Yellowish	Yellowish
FZG Damage step A/16.6/90	DIN 51 354 T2	>12	> 12	>12	>12	>14
FZG wear	DIN 51 354 T2		< 0.2	< 0.2	< 0.2	< 0.2
FZG (Micro pitting) Load/GFT	FVA 54 (I-IV)		>10/High	>10/High	>10/High	>10/High

Available Packs: 1, 5, 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.



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION Product SYF-990/ GEARPLUS FG SERIES (PAG)

 Supplier
 PETRELPLUS INC

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

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 (Monday to Friday)

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2. COMPOSITION

Synthetic base oils and Proprietary additives.

3. HAZARDS INDENTIFICATION

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.

7. 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.



8. TYPICAL PROPERTIES

Viscosity @ 40°C	-150 - 680
Viscosity @ 100°C	-14.7 TO 43
Flash Point, ^o C	- 244 TO 265

10. STABILITY AND REACTIVITY

Stability
Conditions to avoid
Materials to avoid
Hazardous decomposition products

- Stable

- Excessive temperatures
- Strong oxidizers
- 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 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.