

# **Technical Data Sheet**









# SYG-990/1110 FGHT GREASE

# FOOD GRADE HIGH TEMPERATURE GREASE

# **Product Description**

SYG-990/1110 FGHT GREASE is grease which is manufactured from a synthesized hydrocarbon fluid and a non-soap thickener, fortified with PTFE. It is designed for the lubrication of plain and rolling bearings at low to high speeds, worm gears, and other mechanisms, where high friction reduction, low wear, and low lubricant friction losses are required. It offers outstanding performance over wide temperature ranges, with the excellent retention and resistance to high-temperature degradation. In addition, it resists water washing, provides superior load-carrying ability, reduces frictional drag and prevents excessive wear.

The product is approved by NSF International as H1 grade Lubricant. The product meets requirements of USDAH1\* 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 No1419 "List of Proprietary Substances and Non-food Compounds". Product contains only substances permitted under US 21CFR178.3570, 178.3620 and 182 for use in lubricants with incidental food contact.)

It provides minimum resistance to starting at extreme low temperature (down to -54° C), as well as low running torque. And also prevents friction oxidation (fretting) and lubricates rolling element bearing under conditions of high speeds and temperatures. It has also shown superior ability to lubricate heavily loaded sliding mechanisms, such as wing flap screw jacks. Also recommended for industrial lubrication. Typical applications include conveyor bearings, small alternator bearings operating at temperatures near 225° C. high-speed miniature ball bearings, and bearing situations where oscillatory motion, vibration, and fretting create problems.

# **Benefits**

- High thermal stability
- Excellent protection against wear and corrosion.
- Wide temperature range.
- High resistance to water washing.
- Compatible with mineral oil base greases.
- Improved Friction reduction.
- Low lubricant Drag.
- Extreme Pressure Characteristics.
- Low wear rates.
- Maintains excellent grease performance in adverse weather and other waterexposure conditions.
- Causes low resistance during start-up at very low temperatures.



# **Applications**

SYG-990/1110 FGHT GREASE - Synthetic high temperature grease for food and beverage processing equipment.

SYG-990/1110 FGHT GREASE is designed for the lubrication of plain and rolling bearings at low to high speeds, and splines, screws, worm gears, and other mechanisms, where high friction reduction, low wear, and low lubricant friction losses are required. It provides minimum resistance to starting at extreme low temperature (downto-54° C), as well as low running torque.

SYG-990/1110 FGHT GREASE is recommended for use in landing wheel assemblies, control systems and actuators, screw jacks, servo devices, sealed bearing motors, oscillating bearings, and helicopter rotor bearings on military and civil aircraft and on naval shipboard auxiliary machinery. It is also recommended for industrial lubrication, including sealed or repack-able ball and roller bearings wherever extreme temperature conditions, high speeds, or water washing resistance are factors. Typical applications include conveyor bearings, small alternator bearings operating at temperatures near 225° C. high-speed miniature ball bearings, and bearing situations where oscillatory motion, vibration, and fretting create problems.

# **Typical Properties**

SYG-990/1110 FGHTGREASE	NLGI-2	NLGI-1	NLGI-0	NLGI-00
Thickener Type	Inorganic			
Fluid Type	Synthetic Hydrocarbon			
Structure	Smooth, Buttery			
Colour	White			
Penetration, Worked,60X,0.1mm, ASTMD 217	265-295	310-340	355-385	400-430
Viscosity @ 40°C	400	400	400	400
Viscosity @ 100°C	40	40	40	40
	6	6	6	6
Viscosity @ 200°C				
Rust Protection, 48h@125F, Rating, ASTMD 1743	Pass	Pass	Pass	Pass
Load Carrying Capacity, Load-Wear Index, kg ASTMD 2596	30	30	30	30
Dropping Point, °C.(°F.) ASTMD 566, IP132	None	None	None	Non
				e
OperatingTemperatures	-50to250°C	-45to210°C	NA	NA
Water Washout Loss @41C, wt%, ASTMD 1264 (mod)	1	1	1	1
Four-Ball Wear Test, Scar Diameter, mm, ASTM D2266	1.3	1.3	1.3	1.3
Evaporation Loss, 22h, 177C, mass%, ASTMD 2595	10	10	10	10



Available Packs: 1, 5, 18, 50, 180 Kgs.

Shelf Life - 36 Months from the month of manufacturing.

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 SYG -990/1110 FGHT GREASE (FOOD GRADE)

**Supplier** PETRELPLUS INC.

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

Call # +91 22 6216 7072 (Monday to Friday) Cell # +91 93522 25457 marketing@petrelplus.com www.petrelplus.com

#### 2. COMPOSITION

Synthetic Hydrocarbon, inorganic thickener and Proprietary additives.

#### 3. HAZARDS INDENTIFICATION

FIRE -Flammable at high temperature.

**HEALTH** 

Eye contact
-May cause mild irritation to the eyes upon direct contact.
Skin contact
-Prolonged contact may defat the skin or can cause dermatitis.

Inhalation -hazards.

Ingestion -Harmful if swallowed.

#### 4. FIRST-AID MEASURES

Inhalation -Remove person to fresh air. Seek medical help if discomfort persists.

Ingestion -Do not induce vomiting. Seek medical support.

Skin Contact -Immediately flush skin with plenty of water for at least 15 minutes.

Eye Contact -Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally.

### 5. FIRE-FIGHTING METHODS

Extinguishing media -Use dry chemical powder or carbon di – oxide or foam. Special protective equipment -Positive pressure self-contained breathing apparatus.

#### 6. ACCIDENTAL RELEASE MEASURE

Personal protection - Adequate ventilation, gloves, goggles, overalls and boots.

Environmental precautions - Avoid entry into water courses. Clean up method - Absorb on inert material.

#### 7. STORAGE AND HANDLING

Handling - Impervious gloves & eye protection ensure good ventilation. Keep away from source of ignition.

Storage - Store in a cool & dry place.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

Respiratory protection - Not required under normal conditions. Skin/hand protection - Impervious gloves, overalls, and boots.

Eye protection - Use Goggles

### 9. TYPICAL PROPERTIES

Thickener - Inorganic

Fluid Type - Synthetic Hydrocarbon

 $\begin{array}{ccc} \text{Color} & & \text{- White} \\ \text{NLGI} & & \text{- 00 to 2} \\ \end{array}$ 



### 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

Skin contact - Possible irritation
Eye contact - Possible irritation
Inhalation - Not applicable

Ingestion - Irritation. May cause lung damage.

Long term effect - Not known

### 12. ECOLOGICAL INFORMATION

Mobility - Mobile
Degradation - Low
Accumulation -Not expected
Short- & Long-Term effect - Water pollutant

#### 13. DISPOSAL CONSIDERATIONS

Dispose off according to local and national regulations.

### 14. TRANSPORT INFOMRATION

CPL - Not applicable IMO - Not applicable

### 15. REGULATORY INFORMATION

Symbol(s) -Not applicable Phrase(s) - Not applicable Phrase(s) - Not applicable

#### 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.