

# SYNTH POLYTHERM-100, 220 & 460 (Semi-Synthetic Polyurea grease)

#### **DESCRIPTION:**

SYNTH POLYTHERM-100, 220 & 460 is high performance long life polyurea grease suitable in wide range of industrial applications. This grease is formulated with high viscosity & quality synergistic (semi-synthetic) base oil stocks engineered. It contains small dosage of synthetic (PAO) ester additives with special white solid lubricants Mox-Active a German technology improvement additive creates a passive film on friction surfaces before friction occurs, an extremely low coefficient of friction even under extreme pressures. Special EP additives which gives outstanding thermal & superior shear stability, excellent high temperature capabilities, provide strong anti-oxidant, ant-wear, excellent water resistance properties. It also gives excellent lubrication for extended bearings life and gives longer relubrication interval periods over a wide range & high temperature. Excellent oil film retention property when temperature rises the grease bleeds oil and when temperature drops, the free oil returns back to the grease.

**APPLICATIONS INDUSTRY:** Sugar Industry, Steel, Paper, Cement mill, Chemical plants, Textiles, Water pumps, Wind Mill, Power generation & Energy plants operated at high temperatures where grease is exposed to very wet conditions applications.

- SYNTH POLYTHERM-2.5 100 grease is recommended for sealed for life bearings, various bearings
  that require particularly heat resistance, such as home appliance motors and electrical
  components for automobiles, rolling element bearings, high-speed antifriction bearings, electric
  motors, fans, air-conditioning bearings, automotive alternator/generator/starter motor bearings
  and other wide range of industrial applications operating under high speed and high
  temperature conditions. Applications for heavy duty electric motor ball, Pumps, Small, medium
  and large bearings and roller bearing where antifriction bearings operating at high speed & high
  temperature 10,000 to 30000 RPM and greater.
- SYNTH POLYTHERM-00 220 grease is specifically designed various bearings that require particularly heat resistance for excellent flow for automatic centralized and Individualized systems. The enhanced pumpability and low temperature mobility make it an ideal choice for grease systems subject to low ambient temperatures those found in food processing freezers or in outdoor applications. It may also be used for the lubrication of enclosed gears where oil leakage may be a concern.
- POLYTHERM-1 & 2 220 grease is specifically designed for multi-purpose use in heavy-duty plain and anti-friction bearings.
- SYNTH POLYTHERM-1 & 2 460: grease recommended for heavily loaded plain and anti-friction bearings. It is also recommended for bearings where extreme temperatures are a concern, various bearings that require particularly heat resistance, such as steam heated rolls, exhaust fan bearings, felt roll bearings, and oven conveyor bearings. Wind Mill, Power generation & Energy plants, Steel & Cement Segment: Rolling Bearings, Grinding Mills, Ball Mills, Rotor Bearings (Roller Bearings) Coke Oven Plant, Slide Tracks Sintering Machine, Roller Bearings Billet Mould, Hot metal car wheels, Roller Bearings Ladles, Arc Furnaces Steel Melting Shop, Roller Bearings Ladle Turret, Torch Cutter Continuous Casting Machine, Roller Bearings Digester Chemical pulping, Roller Bearings Bleacher Chemical pulping, Wire Press, Screw type Press Dewatering Presses, Breast Roll, Suction Roll, Other Rolls Wet end, Breast Roll, Suction Roll, Other Rolls Wet end, Roller Bearings in Steam Head Dry end, Drying Cylinders, Calendar Rolls Dry end, Soot Blower, Flue gas fan Chemical Recovery System Paper manufacturing. Sugar Industry Segment- Boiler travelling grate bearing. Textile Segment-Top & Bottom Rollers Speed Frame, Ring Frame, Drying Cylinder Bearings Sizing, Fan Bearings Stenter Machine, Dyeing, Finishing.
- Refer to equipment owner's manual for proper lubricant recommendation

### **FEATURES AND BENEFITS**

- Resistant to Alkalis, Acids, Chemicals, steam contaminated environments
- Good start-up characteristics at low temperatures.
- Most suitable grease for cold weather pumpability and low temperature environment.
- Extreme pressure properties to perform under high speed, high temperature & high shock loads.
- Excellent stability and outstanding protection against rust and corrosion.
- Maximum temperature for prolonged usage is -40°C to 200°C.
- Allows use in food and beverage packaging and processing applications
- Helps provide protection under harsh conditions and allows for extended re-lubrication or maintenance intervals.
- Excellent oil film retention property when temperature rises the grease bleeds oil and when temperature drops, the free oil returns back to the grease. Proprietary adhesive, stay-in-place formula helps seal out contaminants & extend lubrication intervals.
- Low consumption & Immediate monetary savings.
- Extends bearings life and gives longer relubrication intervals.
- High protection against seizure and wear, avoiding expensive repairs.
- Excellent flow and pump-ability for automatic centralized and Individualized systems.
- Thermally stable, can withstand high shock loads, and minimizing metal to metal contact.

STEEL SEGMENT	PAPER & PULP SEGMENT	TEXTILE SEGMENT
Rolling Bearings Grinding Mills /	Roller Bearings Digester – Chemical	Top and Bottom Rollers Speed
Ball Mills	pulping	Frame / Ring Frame
Rotor Bearings (Roller Bearings)	Roller Bearings Bleacher – Chemical	Drying Cylinder Bearings
Coke Oven Plant	pulping	Sizing
Slide Tracks Sintering Machine	Wire Press / Screw type Press	Fan Bearings Stenter
	Dewatering Presses	Machine/Dyeing/Finishing
Roller Bearings Billet Mould / Hot	Breast Roll / Suction Roll / Other	
metal car wheels	Rolls Wet end – Paper Manufacturing	
Roller Bearings – Ladles / Arc	Roller Bearings in Steam Head Dry	
Furnaces Steel Melting Shop	end – Paper manufacturing	
Roller Bearings - Ladle Turret/Torch	Drying Cylinders / Calendar Rolls Dry	
<b>Cutter Continuous Casting Machine</b>	end – Paper manufacturing	
Roller Bearings – Work Rolls / Pre-	Soot Blower / Flue gas fan Chemical	
heating Hot Rolling Mill	Recovery System	

## **APPLICATION SEGMENT**

### **PROPERTIES OF SYNTH POLYTHERM GREASE**

ISO Grades	100	220	220	220	460	
NLGI Grade	2.5	00	1	2	1, 2	
Thickener	Synthesized Polyurea					
Colour & Appearance	Green, Blue or Beige / Smooth, buttery & Tacky					
Solid Lubricants	Mox-Active + PAO Ester					
Base oil Type	Synergistic base oils					
Viscosity, Cst @ 40°C	100	220	220	220	460	
Work Penetration	250-260	415	325	280	265-340	
Drop Point	+320	+320	+320	+320	+320	
Four Ball Weld Load kgs	+250	+315	+315	+315	+315	
Operating Temperature °C	-20°C to 200°C					

#### **POWERMAXX LUBE INDIA**

Website: www.powermaxxlube.com Email: info.powermaxx918@gmail.com,info@powermaxxlube.com Contact Number: 996748763, 7506973307