

## **SYNTH VALVE WH-1000** (Geothermal Wellhead Valves Grease)

(Synthetic high temperature valve grease reduce geothermal production wellhead, x-mas tree valves, gate & plug valves maintenance costs while improving valve reliability)



#### **DESCRIPTION**

SYNTH VALVE WH-1000 is a hydrocarbon resistance grease designed specifically for wellhead applications. SYNTH VALVE WH-1000 is blended with special chemical resistance synthetic oil, Inorganic thickener formulated with special chemical additives like anti-oxidant, anti-rust, molybdenum disulphide, graphite, corrosion inhibitor as well as special extreme pressure (EP) additives to withstand severe corrosion due to hydrogen sulphide and improve metal adhesion and provide excellent film forming in applications of valves in oil drilling. This is a hydrocarbon resistance grease having excellent metal adhesion and lubricating properties even at high pressures and high temperature which gives long lasting protection against crude oil, gas, petroleum liquids, acid and water.

#### **APPLICATIONS**

- SYNTH VALVE WH-1000 is formulated to use in valve wellhead valve, injector and producer gate valve, plug valve, gaskets, packing, pipe threaded connections, bolts, couplings and other areas where high solvent resistance is required specially used in steam and wellhead service operations.
- Excellent lubricant for applications involving Hydrogen Sulphide corrosion.
- Mainly suitable for API 6A Wellhead Gate Valves where sour crude & gas other impurities are present.

#### **ADVANTAGES & BENEFITS**

- Excellent highly chemical resistance, H<sub>2</sub>S, CO<sub>2</sub>, HCL corrosion resistance and hydrocarbon resistance.
- Excellent adhesive properties to remain in the seal plug valve cavity under high temperature and pressure upto 15000 psi conditions.
- Protection against rust and corrosion, very good oxidation resistance
- Maintains viscosity at high temperatures and does not harden, high film strength
- Good low temperature pumpability & Can greatly extend re-greasing intervals.
- Excellent extreme pressure and wear resistance, Low oil separation even at elevated temperatures.
- Reduced maintenance costs due to possible lifetime lubrication and improving valve reliability.
- Able to remain stable at extreme operational high temperature and pressure ranges.

Chemically Resistance: Extraordinary resistant to Crude oil, Natural gas, Diesel & Petrol fuel, H<sub>2</sub>S, CO<sub>2</sub>, Salt water/Brines, Steam & Condensates, 28% frac acid (HCL), Produced sand & Drilling muds,







### **PROPERTIES**

NLGI GRADE	1 & 2
Worked Penetration, 60x (ASTM D217)	295 - 310
Colour & Appearance	Blackish Grey , Smooth Homogeneous & Tacky
Base Oil Type	Specialized chemical resistant synthetic polymer
	base oil for all kinds of Petroleum Industries
Thickener	Inorganic (non-soap)
Solids Content	Molybdenum disulfide
Additives	Anti-corrosion, Anti-Oxidant, Anti-Rust, Special EP,
	Friction Modifiers, H2s inhibitors etc
Drop Point (IP 396)	Non-melting
Resistance to water spray (ASTM D4049)	<2.5% mass lost
Copper Strip corrosion @100°C for 24 hrs	<b>1</b> a
Oil Separation 30 hours @ 160°C, (IP 121)	<1.5%
Evaporation, % loss @100°C for 24 hrs	0.2% (max)
4-Ball Weld Load in kgs (IP 239)	800
Operating Range °C	-40°C to 1000°C

# **Hydrocarbon Resistance Test**



**SYNTH HTL STEAM PLUS** 



**Competitor Product**