

## **SYNTH HTL STEAM PLUS** (Steam Injector & Geothermal Wellhead Valves Grease)

(Synthetic High Temperature Valve Grease for Steam Injection & Geothermal Production Wellhead
Gates Valve, Plug Valve, Threaded Connections)



#### **DESCRIPTION**

SYNTH HTL STEAM PLUS is a high temperature valve grease based blended with special chemical resistance synthetic oil & Inorganic thickener. It is specially 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 steam service valves which gives long lasting protection against crude oil, gas, petroleum liquids, acid and water. This grease is suitable for plug valve, threaded connections, injector and producer gate valve specially used in steam and wellhead service operations.

#### **APPLICATIONS**

- SYNTH HTL STEAM PLUS 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, H₂S, CO₂, Salt water/Brines, Steam & Condensates, 28% frac acid (HCL), Produced sand & Drilling muds.







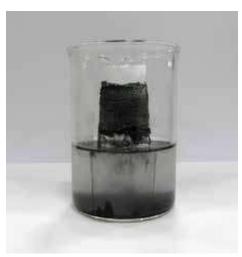
### **PROPERTIES**

NLGI GRADE	2.5
Worked Penetration, 60x (ASTM D217)	250-270
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 & Graphite
Additives	Anti-corrosion, Anti-Oxidant, Anti-Rust, Special EP,
	Friction Modifiers, H2s inhibitors etc
Drop Point (IP 396)	Non-melting
Copper Strip corrosion @100°C for 24 hrs	1a
Resistance to water spray (ASTM D4049)	<2.5% mass lost
Oil Separation 220°C, 30 hours (ASTM D6184)	<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 400°C

# **Hydrocarbon Resistance Test**



**SYNTH HTL STEAM PLUS** 



**Competitor Product**