

Product Data Sheet

Pyrosafe 46 XD

Description and Applications

Saheli Pyrosafe 46 XD is a high performance fire-resistant hydraulic fluid designed for use in electro-hydraulic governor control systems of steam turbines, including systems using fine tolerance servo valves. **Saheli Pyrosafe 46 XD** is based on triaryl phosphates manufactured from carefully selected raw materials to provide exceptional hydrolytic and oxidation stability. **Saheli Pyrosafe 46 XD** has inherent high flash point, fire point and auto ignition temperature eliminating the risk of fire potentially caused by mineral oil products. Physical properties, such as foaming, air release and demulsibility are carefully controlled within turbine manufacturers' specified limits.

Saheli Pyrosafe 46 XD is approved against Siemens specification TLV 9012 02 and is also recommended for use as fire resistant lubricant in steam and gas turbines.

Features and Benefits

- Excellent fire resistance increases safety in fire-sensitive applications.
- Exceptional oxidation stability provides long service life under normal operating conditions.
- Superior hydrolytic stability resists decomposition of ester under the influence of moisture and water in the system.
- Good demulsibility enables rapid separation of oil from water
- Rapid air release minimizes air entrapment in governor control systems and ensures safe operation.

Applications

- Electro-hydraulic governor control systems of steam turbines, including systems using fine tolerance servo valves.
- Main bearings in steam and gas turbines, generators and cooling pumps.
- Hydraulic and power transmission systems in steel, mining and other applications requiring fire resistant hydraulic fluids.

Specifications

SIEMENS TLV 9012 02

| Test Parameters | Test Method | Typical Results |
|--------------------------------------|---------------|-----------------|
| Density @ 15°C gm/cm3 | ASTM D 1298 | 1.13 |
| Air release @ 50°C, minutes | ASTM D 3427 | 2 |
| Viscosity @ 40°C (cSt) | ASTM D 445 | 43.4 |
| Cleanliness level (at filling stage) | ASTM NAS 1638 | 6 |
| Auto Ignition Temperature, °C | ASTM D 2155 | 575 |
| Neutralization number, mgKOH/g | ASTM D 664 | 0.06 |
| Water Content, % | ASTM D 1744 | 0.06 |
| Pour Point °C | ASTM D 97 | -20 |
| Flash Point (COC) °C | ASTM D 92 | 246 |
| Fire Point (COC) °C | ASTM D 92 | 368 |
| Emulsion Test @ 54°C, 30 min max | ASTM D1401 | Pass |