

SHELL IRUS FLUID DR

HFD-R TYPE FIRE-RESISTANT HYDRAULIC FLUID

DESIGNED TO MEET CHALLENGES

Shell Irus Fluid DR is a tri-aryl phosphate ester fire-resistant hydraulic fluid and contains carefully selected additives to give superior oxidation and hydrolytic stability characteristics.

PERFORMANCE FEATURES

- n Good fire resistance.
- n Non-toxic under EEC regulations.
- n Extended fluid change intervals.
- n Pump life similar to life with mineral hydraulic oils.
- n Fire resistance maintained during the life of the fluid.
- n Compatible with most seal materials.

APPLICATIONS

- n Hydraulic and power transmission systems used in the steel and mining industries and other applications which call for a fire resistant hydraulic fluid.
- n Die-casting machines.
- n Billet loaders.
- n Electric arc furnaces.
- n Forging presses.
- n Welding robots.
- n Continuous casting machines.
- n Hydraulic presses.
- n Extrusion presses.

COMPATIBILITY AND MISCIBILITY

SEALS

- n Butyl, Viton, Ethylene/Propylene.*

PAINTS

- n Epoxy resin paints are compatible.

METALS

- n Satisfactory with common constructional metals. Aluminium and its alloys should be hard anodised and not used as bearing surfaces.

* Contact seal suppliers for their advice.

ADDITIONAL INFORMATION

LUBRICATION

The lubricating properties of Shell Irus Fluid DR compare favourably with those of an equivalent mineral oil of the same viscosity.

As a result, in many pumps, they show similar performance (bearing life and wear properties) to mineral oil, although some slight de-rating may be necessary at very high loads. Contact with the pump manufacturer is advisable before use.

TYPICAL PHYSICAL CHARACTERISTICS

| CHARACTERISTICS | 46 |
|--|-----------------------|
| ISO Fluid Type | HFD-R |
| Appearance | Yellow Clear fluid |
| Kinematic Viscosity (ASTM D 445) | |
| @ 0°C mm ² /s | 1600 |
| @ 40°C mm ² /s | 43 |
| @ 50°C mm ² /s | 26 |
| @ 100°C mm ² /s | 5.3 |
| Viscosity Index (ISO 2909) | 15 |
| Density @ 15°C kg/m ³ (ISO 12185) | 1125 |
| Pour Point °C (ISO 3016) | -18 |