



Energyn SF-A Concentrate

Concentrate for High Water Content Fire Resistant Hydraulic Fluid

Description; Description

Energyn SF-A Concentrate when added at 5% to water forms a high water content fire resistant hydraulic fluid. Energyn SF-A Concentrate is supplied on the basis that the customer will add it to the water of appropriate quality on site.

The micro-emulsion formed has excellent anti-wear and anti-corrosion properties. The micro-emulsion conforms to the CETOP classification HF-A

Applications; Applications

As a high water based fluid the diluted fluid can be used as a fire resistant hydraulic fluid in hydraulic systems designed for this fluid, and within the temperature limitations of these fluids.

It is also a suitable replacement for soluble oils in water hydraulic systems which are not viscosity dependant.

Areas of potential application are:-

General Manufacturing, steel, mining, foundry and die-casting facilities.

Machine tools used in automotive and related industries operating at pressures below 70 bar.

In all applications presently operating on soluble oils.

To prepare the emulsion the Energyn SF-A Concentrate must be gradually added to water (never the reverse) while the mixture is being agitated.

Water qualities of up to 200ppm (CaCO₃) hardness are acceptable.

Nitrile seals are acceptable in static applications, but dynamic seals need to be trialled before use. High water based fluids react adversely with painted surfaces. Surfaces should therefore be unpainted or treated with coatings suitable for contact with emulsions. (eg two pack epoxy resins)

Systems containing magnesium, cadmium, zinc and their alloys are not suitable.

Main Benefits; Main Benefits

-excellent anti-wear and anti-corrosion performance

-wide range of applications.

-compatible with metals used in HF -A applications, including yellow metals and aluminium

-a reduced stock holding as concentrate is only 5% of final volume

Storage; Storage

All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and the obliteration

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of drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing conditions.; of drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing conditions.

Health, Safety and Environment; Health, Safety and Environment

Health, safety and environmental information is provided for this product in the Materials Safety Data Sheet. This gives details of potential hazards, precautions and First Aid measures, together with environmental effects and disposal of used products.; Health, safety and environmental information is provided for this product in the Materials Safety Data Sheet. This gives details of potential hazards, precautions and First Aid measures, together with environmental effects and disposal of used products.

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Typical Characteristics; Typical Characteristics

| | Test Methods; Test Methods | Units; Units | Grade ; Grade : | |
|---|----------------------------|--------------------|--------------------------|--------------------|
| | | | Energyn SF-A Concentrate | 5% Emulsion |
| Appearance | Visual | - | opaque amber fluid | opaque white fluid |
| Density at 15°C | ISO | kg/m ³ | 104 | 100 |
| Kinematic viscosity at 40°C | ISO | mm ² /s | 350 | <2 |
| Pour Point | | °C | -9 | <0 |
| pH | - | - | 10.4 | 10.4 |
| Rust Prevention 2% Energyn SF-A Concentrate in 0.05M NaCl water IP 135 | | | | pass |

The above figures are typical of those obtained with normal production tolerance and do not constitute a specification.; The above figures are typical of those obtained with normal production tolerance and do not constitute a specification.

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BP Lubricants and Special Products Limited
Witan Gate House Lubricants Helpline: 0845 - 6031080
500/600 Witan Gate Fax: 0845 - 6031070
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500/600 Witan Gate Fax: 0845 - 6031070
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