

MOTOROL HYFLOW DD

CIRCULATING & HYDRAULIC OIL (DETERGENT/DISPERSANT TYPE)

Introduction:

MOTOROL Hyflow DD fluids are mineral based hydraulic fluids containing a selective additive system for protection of hydraulic system. These fluids are zinc free and contain detergent/dispersant additives. Contaminants, deposits, and water, which may have entered the hydraulic system, can damage the pump parts; with Hyflow DD, these elements are dispersed and held in suspension and adhering particles/deposits are dissolved. The detergent properties allows to disperse the entered water in oil, which avoids the formation of undesired water pockets. The addition of detergent/dispersant might compromise the air release properties slightly.

Applications:

MOTOROL Hyflow DD grade are recommended for Hydraulic system and a wide Variety of circulation systems of industrial and automotive equipments. They are used in applications that have high levels of contamination e.g. mobile hydraulic units (wheel loaders, truck hydraulic systems, excavators, bulldozers etc.) They are suited for use in hydraulic system where there are high possibilities of water contamination particularly where a water mixed cutting fluid may enter the hydraulic system.

Advantages:

- ◆ Excellent anti-wear properties
- ◆ Excellent viscosity temperature properties
- ◆ Emulsifies water and water mixed cooling fluids, without deteriorating the anti-corrosion and lubricating properties. Capable of dispersing water up to approx. 2% by weight
- ◆ Excellent resistance to thermal degradation
- ◆ Good hydraulic ability
- ◆ Low pour point
- ◆ Special detergent/dispersant systems avoids formation of sludge and avoids formation of carbonization or acid products

Performance Standard: Meets DIN 51524 HLP part 2 with additional detergent dispersant qualities, HLPD.

Typical Specifications:

| Characteristics | Test Method | 32 | 46 | 68 |
|-------------------------------------|-------------|----------------------------------|-----------|-----------|
| Appearance | Visual | Bright and Clear (in all grades) | | |
| Colour | ASTM D1500 | 0+ | 0+ | 0+ |
| Density at 15°C (g/ml) | ASTM D1298 | 0.850 | 0.875 | 0.880 |
| Kinematic Viscosity at 40 °C (cSt) | ASTM D445 | 28.8-35.2 | 41.0-50.0 | 61.2-74.8 |
| Kinematic Viscosity at 100 °C (cSt) | ASTM D445 | 4.5-5.5 | 6.5-7.5 | 7.5-8.5 |
| Viscosity Index, Min | ASTM D2270 | 105 | 105 | 105 |
| Flash Point °C, Min | ASTM D92 | 140 | 160 | 190 |
| Pour Point °C, Min | ASTM D97 | (-)27 | (-)24 | (-)21 |
| Copper strip corrosion | ASTM D130 | 1A | 1A | 1A |
| Steel Corrosion | - | Pass | Pass | Pass |

Environment, Health & Safety:

Every care has been taken to ensure the accuracy of the information in this PDS. This however may be affected by subsequent improvement in product (R&D). MSDS is available for all MOTOROL products on request. MOTOROL products are unlikely to present any health and safety hazard with proper use for the correct application and maintain proper personal hygiene. Do not spill oils on the shop floor, discharge into drains, ground or water sources.