

# **MAK CD 40**

High performance oil for engine, transmission, hydraulic systems and final drives

MAK CD 40 is a high performance oil formulated with very high quality base oils and advanced additive technology. It is uniquely designed to optimise the performance of engine, transmission, hydraulic systems and drive trains. The oil offers enhanced protection to hydraulic system components even in high pressure systems. It is formulated with high quality detergency additive that minimises engine deposits through excellent sludge and varnish control. MAK CD 40 is designed especially for earthmoving machinery and off-highway construction equipment operating under severe conditions. It resists oxidation and offers effective low and high ambient temperature performance.

#### **Applications:**

MAK CD 40 is developed to deliver exceptional performance in naturally aspirated, supercharged and turbocharged diesel engines, power train transmissions, hydraulic systems and final drives of off-highway, construction equipment and earthmoving equipment operating round the clock under heavy loads and where an SAE 40 monograde oil is specified.

## Performance/ Benefits:

Resistance to Oxidation and Thermal Degradation – resists the effects of oxidising agents and thermal stress. Extends life of transmission components due to minimal deposits formation tendencies.

**Excellent Anti-wear Capability** – high level of anti-wear protection to the transmission, gear box, engine and hydraulic system components. Enhances equipment life and reliability, reduces breakdowns.

**Anti-foaming Characteristics** – exhibits low foaming tendency and ensures effective lubrication and functioning under all operating conditions.

**Excellent Rust and Corrosion Protection** – prevents corrosive wear and reduces down time and maintenance cost.

**Better Low Temperature Lubrication** – facilitates easy startup and gear shift at low ambient temperatures. Reduces wear at low ambient temperatures. **Reduced Oil Consumption** – the high quality base oil used in formulation exhibits lower volatility and has the potential of lower oil consumption.

**Good TBN Retention** – provides excellent control over the corrosive acids formed due to oil oxidation and combustion process.

#### **Performance Level/ Specification:**

Meets the performance benchmarks of

API CF

#### Typical Physico-Chemical Data: MAK CD 40

Characteristics	Method	Value
SAE Viscosity Grade	SAE J300	40
Color	Visual	Brown
Appearance	Visual	Clear and
		Bright
Density @29.5°C, g/cc	ASTM D1298	0.893
Kinematic Viscosity @40°C, cSt	ASTM D445	142.2
Kinematic Viscosity @100°C, cSt	ASTM D445	14.3
Viscosity Index	ASTM D2270	98
Copper Corrosion, 100°C, 3 hrs.	ASTM D130	1a
Flash Point, <sup>o</sup> C	ASTM D92	242
Pour Point, <sup>o</sup> C	ASTM D97	-9
Foaming Tendency	ASTM D892	
a) Sequence I		0/0
b) Sequence II		10/0
c) Sequence III		0/0

### **Storage & Handling:**

The product should be stored inside. Keep it properly sealed to avoid contamination. Avoid freezing and store under protected storage conditions.

#### **Health & Safety:**

It is unlikely to be hazardous when properly used in recommended applications. Contamination of the oil from other oils, greases, chemicals, dirty water etc. can occur during the use. It should be avoided. Regular monitoring of the in-use product is recommended.