PRODUCT DATASHEET

eni Acer

eni ACER lubricants are superior quality oils for use in circulation systems and in hydraulic circuits. They are obtained from selected paraffinic base stocks treated with antioxidant and antirust additives (R & O oils, ISO-L-CKB and ISO-L-HL classifications).
They are available in many grades which cover a very broad range of viscosity and are therefore able to meet all requirements of practical interest.

CHARACTERISTICS (TYPICAL FIGURES)

eni		15	22	32	46	68	100
Viscosity at 40°C	mm²/s	15	21	30	44	64	100
Viscosity at 100°C	mm²/s	3,3	4,2	5,3	6,8	8,6	11,4
Viscosity Index	-	98	100	106	100	98	95
Flash Point COC	°C	180	202	214	226	238	252
Pour Point	°C	-27	-21	-18	-18	-18	-15
Mass density at 15°C	kg/l	0,853	0,861	0,870	0,873	0,881	0,887

eni		150	220	320	460	680	800*
Viscosity at 40°C	mm²/s	141	235	327	477	680	790
Viscosity at 100°C	mm²/s	14,4	19,6	24,6	31,4	37,5	41,8
Viscosity Index	-	95	95	95	95	90	90
Flash Point COC	°C	264	270	280	290	300	300
Pour Point	°C	-15	-15	-12	-12	-9	-9
Mass density at 15°C	kg/l	0,890	0,893	0,896	0,901	0,915	0,918

PROPERTIES AND PERFORMANCE

- **eni ACER** oils have a high Viscosity Index which minimizes changes in viscosity and hence in the load bearing capacity of the lubricant film over a wide range of operating temperatures.
- All grades have good oxidation stability and aging resistance.
- All grades have a low pour point; the most fluid grades and those of intermediate viscosity will flow at temperatures close to -20°C
- All grades possess good water-separating ability and so do not form stable emulsions, with consequent loss of lubricating power.
- Their outstanding antifoam properties and capacity to release entrained air rapidly ensure excellent incompressibility. This property, which is required by hydraulic fluids, prevents any pumping and circulation troubles, and reduces the rate of thermal and oxidation alteration.
- All grades possess good antirust properties.
- The oils are compatible with the most common elastomers used with mineral oils (they do not cause swelling and/or marked variations in hardness).

eni Acer

APPLICATIONS

eni ACER oils are hydraulic fluids suitable for both hydrostatic and hydrodynamic circuits (with the exception of special automatic car transmissions), particularly when high aging resistance, antirust properties and demulsibility are required. They must not however be used when the pumps or the equipments installed need boundary layer lubrication, since they do not possess antiwear properties. The oils are particularly recommended for oil bath or circulation lubrication of the widest range of machine parts, such as, for example:

- journal
- bearings
- antifriction bearings
- crank mechanisms
- gears not requiring EP protection (the limit value of 1000 MPa - 10000 kg/cm; - can be broadly accepted for the Hertz load; but high flow rates and shock loads considerably lower this limit)
- oil-bath joints and clutches

The oils are used for lubricating air compressors. The 32, 46, 68 and 100 grades are at VCL level of DIN 51506, while ACER 150, 220, 320 and 460 are at VBL level.
They can also be employed for uses other than lubrication, where the properties of high-quality paraffinic oils are needed.
eni ACER 100, especially, is used as crankcase oil in large diesel engines with separate lubrication and water-cooled pistons.

SPECIFICATIONS

eni ACER oils meet the requirements of the following specifications:

- MORGOIL (Morgoil Lubricant Specification) Revision 3.0 April 15th 1999
- J.P. SAUER &SOHN (Acer 100)

circulating oils:
- CINCINNATI P-62
- DIN 51517 t.2 CL

hydraulic oils:
- AFNOR NF E 48600 HL
- BS 4231 HSC
- CETOP RP 91 H HL
- DENISON HF 1A
- DIN 51524 t.1 HL
- ISO-L-HL

R&O gear oils
- ISO-L-CKB
- ANSI/AGMA 9005-94 (AGMA NR. 0,1,2,3,4,5,6,7,8)

compressor oils:
- DIN 51506 VBL and VCL
- ISO-L-DAB

crankcase oils for 2 stoke marine diesel
- NEW SULZER DIESEL ZBS 2201