

Aircol CM Range

Compressor Oil

Description

The Castrol Aircol™ CM compressor oil range of high quality lubricants are based upon highly refined mineral oil, enhanced with additive technology providing excellent thermal and oxidative stability and good load carrying capacity, compared to other products in the same class.

Application

Aircol CM grades are formulated without zinc additives (ashless oils), recommended for the lubrication of rotary screw and reciprocating compressors.

Aircol CM is classified as follows:

ISO 6743-3 Compressor Oils

DAA and DAB for reciprocating (piston) and drip freed rotary air compressors

DAG and DAH for oil-flooded rotary screw air compressors

Aircol CM compressor oils exhibit low carbon forming tendencies and meet the requirements of the DIN 51506 VDL classification for reciprocating compressors having air discharge temperatures up to 220°C.

For both oil flooded and oil injected rotary screw compressors operating continuously at air discharge temperatures up to 90°C. The product has been designed to meet service drain intervals of up to 4000 hours. For intermittent or continuous operation with air discharge temperatures above 90°C the manufacturers' standard oil change periods should be used.

The high FZG load carrying is designed also to meet geared compressor units.

Selection of the required viscosity grade should be based upon the compressor manufacturers' recommendation.

However as a general guide Aircol CM 32 and 46 are suitable for oil flooded rotary compressors, whereas Aircol CM 68, CM 100 and 150 would be selected for lubricating the crankcase and cylinders of reciprocating compressors. Aircol CM 150 is also recommended for sliding-vane compressors, or for reciprocating units at high ambient temperatures.

The Aircol CM range is fully compatible with Castrol Aircol PD and MR ranges.

Advantages

- Good water separation characteristics allows condensation to readily separate from the oil, minimising the risk of emulsions which could block the oil separator element.
- Fully inhibited against corrosion which enables protection even when operating under humid conditions.
- Good thermal stability, low volatility and low carbon formation reduces the risk of fire and explosion and leads to a longer operating life (up to 4000 hours).
- Low deposit forming tendencies extends oil change intervals and provides longer air filter life which contributes to a reduction in maintenance costs.
- Excellent coalescing properties mean little carry over of oil in the air stream.
- High load carrying to meet requirements of geared compressor units

Typical Characteristics

Name	Method	Units	CM 32	CM 46	CM 68	CM 100	CM 150
Appearance	Visual	-	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright
ISO Viscosity Grade			32	46	68	100	150
Density @ 15°C / 59°F	ISO 12181 / ASTM D4052	kg/m ³	870	880	880	880	880
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm ² /s	32.0	46	68	100	150
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm ² /s	5.6	7.1	9.0	11.5	16.0
Viscosity Index	ISO 2909 / ASTM D2270	-	113	113	111	107	111
Pour Point	ISO 3016 / ASTM D97	°C/°F	-41/-42	-38/-36	-36/-33	-33/-27	-33/-27
Foam Sequence I - tendency / stability	ISO 6247 / ASTM D892	ml / ml	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
Water Separation @ 54°C / 129°F (40/37/3)	ISO 6614 / ASTM D1401	minutes	7	11	13	-	-
Water Separation @ 82°C / 180°F (40/37/3)	ISO 6614 / ASTM D1401	minutes	-	-	-	5	15
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	223 / 433	230 / 446	240 / 464	240 / 464	240 / 464
Rust test - synthetic seawater (24 hrs)	ISO 7120 / ASTM D665B	Rating	Pass	Pass	Pass	Pass	Pass
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1	Failure Load Stage	> 12	> 12	> 12	> 12	> 12
Oxidation Stability - Rotating Pressure Vessel test	ASTM D2272	minutes	1560	1530	1570	1934	1476

Subject to usual manufacturing tolerances.

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