



Aircol CM Range

Air Compressor Lubricants

Description

The Castrol Aircol™ CM Air compressor oil range, of high quality lubricants, is 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 reciprocating and rotary screw air compressors.

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

For both oil flooded and oil injected rotary screw air 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 air compressor units requirements.

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 air compressors, whereas Aircol CM 68, CM 100 and 150 would be selected for lubricating the crankcase and cylinders of reciprocating air compressors. Aircol CM 150 is also recommended for sliding-vane air compressors, or for reciprocating units at high ambient temperatures. The Aircol CM range is fully compatible with Castrol Aircol PD and MR ranges.

Aircol CM air compressor oil range 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

Specific grades within the Aircol CM air compressor oil range, meet the requirements of:

Sauer Compressors, Hatlapa (Types L, V, VA and W),

Yanmar, Sanwa, Matsubara, Tanabe, Teikuko,

Dongwha Pnetec, Bumhan,

Burckhardt (VSB 1001132 E01 02).

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	855	858	862	866	869
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	-	100	100	100	95	95
Pour Point	ISO 3016 / ASTM D97	°C/°F	-40/-40	-38/-36	-36/-33	-33/-27	-30/-22
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	8	15	15	-	-
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	1500	1500	1500	1500	1500

Subject to usual manufacturing tolerances.

Aircol CM Range

22 Sep 2020

Castrol, the Castrol logo and related marks are trademarks of Castrol Limited, used under licence.

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.

Castrol Marine, Technology Centre, Whitchurch Hill, Pangbourne, Reading RG8 7QR, United Kingdom

www.castrol.com/marine