

Tribol CS 1750 Range

Synthetic Compressor Oils

Description

Castrol Tribol™ CS 1750 (Previously named Tribol 1750) synthetic blend compressor oils are intended for use in stationary and portable flooded rotary compressors. Castrol Tribol CS 1750/46 and 68 are also suitable for use in non-crosshead type reciprocating, or drip-feed reciprocating and rotary compressors. The Tribol CS 1750 range of oils may also be used in various process gas applications.

These products are formulated with advanced additives, providing excellent lubricity and antiwear protection for the improved service life of flooded rotary compressor air ends, reciprocating compressor piston rings, rider bands and crankcase components and rotary compressor vanes and bearings.

Their exceptional oxidation resistance minimizes varnish and carbonaceous residues on compressor components and in-gas passages, inner-coolers, after-coolers, etc. The inherent solvency of the base fluid reduces the build-up of contaminants and oxidation by-products in oil sumps and oil piping. The superior rust, corrosion, and antifoam protection provides optimum compressor performance under severe operating conditions and extended oil drain cycles. The high resistance to sludging helps maximize the service life of flooded rotary compressor air/oil separators.

Tribol CS 1750 synthetic blend compressor oils have a high viscosity index and may be used over a broader operating temperature range than conventional mineral oil based compressor lubricants.

Application

Tribol CS 1750 synthetic blend compressor oils are designed for use in the following applications :-

- Most types of flooded and drip-feed rotary compressors, as well as non-crosshead and drip-feed reciprocating compressors.
- Axial flow, barrel type and integral gear-driven centrifugal compressors, where extended oil drain cycles and improved mechanical component life is desired.
- Also suitable for use in many non-compressor applications. For example, bearings or enclosed gear drives that require the use of non-EP oils.

Tribol CS 1750 synthetic blend compressor oils are compatible with most common elastomers. However, Tribol CS 1750 synthetic blend compressor oils are not recommended for use in applications containing EPR elastomers. These oils are recommended for applications where oil sump temperatures are lower than -15°C / 5°F.

Advantages

- In Flooded Rotary Compressors - Lower volatility than straight mineral oils means reduced oil carry-over, improved air/oil separator efficiency and reduced oil consumption. Superior oxidation resistance and natural solvency reduces air/oil separator maintenance, inhibits sediment build-up and the formation of varnish residues.
- In Drip-feed Reciprocating and Rotary Compressors - Formation and build-up of varnish and carbon deposits are reduced to minimize valve sticking and wear. In combination with improved piston ring-sealing, the resultant reduction in re-compression can measurably improve compressor safety and efficiency.
- In Centrifugal Compressors - Higher viscosity at operating temperature increases lubricant film thickness, thus improving the service life of critical mechanical components such as bearings and gears. Superior oxidation resistance retards the formation of varnish residues, and when used in conjunction with a recommended oil monitoring program, significant extensions in oil-drain intervals are possible.

Typical Characteristics

Name	Method	Units	CS 46	CS 68
ISO Viscosity Grade	-	-	46	68
Specific Gravity @ 15°C / 59°F	ASTM D1298 / ISO 3675	-	0.90	0.90
Kinematic Viscosity @ 40°C / 104°F	ASTM D445 / ISO 3104	mm ² /s	46	68
Kinematic Viscosity @ 100°C / 212°F	ASTM D445 / ISO 3104	mm ² /s	7.2	9.3
Viscosity Index	ASTM D2270 / ISO 2909	-	116	114
Flash Point - open cup method	ASTM D92 / ISO 2592	°C/°F	254 / 490	271 / 520
Fire Point	ASTM D92 / ISO 2592	°C/°F	274 / 525	299 / 570
Pour Point	ASTM D97 / ISO 3016	°C/°F	-38/-36	-26/-15
Carbon residue - Conradson test	ASTM D189 / ISO 6615	% wt	0.07	0.07
Acid Number	ASTM D974 / ISO 6618	mgKOH/g	0.15	0.15
Four Ball Wear test - Wear Scar Diameter (40 kgf / 75°C / 1800 rpm / 1 hr)	ASTM D2266	mm	0.40	0.40
Falex Pin & Vee Block test - Antiwear properties	ASTM D 2670-10	Teeth Wear (number)	+5	+4
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1	Failure Load Stage	11	11

Subject to usual manufacturing tolerances.

This product was previously named Tribol 1750. The name changed in 2015

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10 Feb 2015

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