



Tribol™ SW 1066 Range

Slideway Oil

Description

Castrol Tribol SW™ 1066 (Previously called Tribol™ 1066) is a high performance slide and way lubricant. Tribol SW 1066 was developed specifically to lubricate the slides and ways of modern metalworking machine tools used in high precision, high volume manufacturing.

Demands for increased production have led to the design of higher and higher speed machines. Increased operating speeds have also spawned new metal removal fluids and coolants which are highly surface active to increase the speed of tool wetting and the removal of heat.

The surfactant additives used in these modern coolants have a detergent and cleansing action on oil and can rapidly displace lubricants used to protect slides and ways.

Tribol SW 1066 is manufactured with the highest quality base oils and additives available. The base oils are highly refined paraffinic base stocks with high Vis. They were selected for their ability to sustain a lubricating film despite sudden changes in load or shearing forces. The formulation includes select polymer additives for both adhesive and cohesive characteristics.

A carefully balanced treat rate of rust and oxidation inhibitors offers maximum rust protection for parts and long service life from the oil. Tribol SW 1066 is not corrosive to ferrous or nonferrous metals.

Application

Tribol SW 1066 was developed primarily to lubricate modern machine tools. The special formulation of Tribol SW 1066 resists the cleansing action of surface-active coolants so that wear on the slides and ways is minimized and motion is smooth and accurate. Interaction between the metalworking fluid and slideway lubricant can result in lower metalworking fluid performance and reduced fluid life. Tribol SW 1066 was specifically developed to be nonemulsifying with water, synthetic and semi-synthetic metal removal fluids. It rapidly pops out of these fluids as free tramp oil without removal of the fluid's additives. This is achieved without the use of demulsifiers or surfactants that can affect the stability of the coolants. This permits servicing of the metal removal fluids using conventional weiring or skimming techniques. With the Tribol SW 1066, positive lubrication can be achieved to control wear and promote machining accuracy without excessive reapplication or high lubricant consumption.

Advantages

- Tribol SW 1066 effectively controls "stick-slip," resulting in higher quality output, fewer rejects and reduced operating costs.
- Tribol SW 1066 is compatible with both metal and plastic materials used on modern machining equipment.
- Outstanding demulsification properties with quality aqueous cutting fluids prolongs coolant life for additional cost savings.

Typical Characteristics

Name	Method	Units	SW 68	SW 220
Specific Gravity @ 15.6°C / 60°F	ASTM D1298	-	0.88	0.87
Kinematic Viscosity @ 40°C / 104°F	ASTM D445 / ISO 3104	mm ² /s	68	233
Kinematic Viscosity @ 100°C / 212°F	ASTM D445 / ISO 3104	mm ² /s	8.97	20.9
Viscosity Index	ASTM D2270 / ISO 2909	-	106	106
Flash Point - open cup method	ASTM D92 / ISO 2592	°C/°F	232 / 450	232 / 450
Copper corrosion (3 hrs@100°C/212°F)	ASTM D130 / ISO 2160	Rating	1a	1a
Four Ball Weld Load test - Weld Point	ASTM D2783	kgf	200	200
Falex Pin & Vee Block test - Antiwear properties	ASTM D 2670-10	Teeth Wear (number)	5	5
Falex Pin & Vee Block test - Antiwear properties	ASTM D 3233-03(method B)	Fail Load (lbf)	1750	1750
Timken OK Load test	ASTM D2782	kg / lb	29.4 / 65	29.4 / 65
Four Ball Wear test - Wear Scar Diameter (15 or 40 kgf / 75°C / 1200 rpm / 1 hr)	ASTM D4172	mm	0.40	0.40
Cincinnati Milacron	(CMI Ref. #9906030)	-	P-47	-
Cincinnati Milacron	(CMI Ref. #9511024)	-	-	P-50

Subject to usual manufacturing tolerances.

This product was previously called Tribol™ 1066. The name changed in 2015

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