



509 Cutting Oil

Medium Duty Non-Staining Cutting Fluid

509 Cutting Oil are general purpose cutting fluids for all types of moderately severe machining operations. These fluids are formulated with high levels of extreme pressure additives, making them able to withstand a demanding workload. These products do not contain active sulfur but are still made with fat content allowing excellent lubrication and machining performance. These fluids are specifically formulated for the machining of non-ferrous metals and contain fat for better lubricity and improved surface finish.

Product Features:

- Improves Finish – The fat used gives machined parts an improved surface finish
- The translucency of this fluid allows visual inspection of both tool and parts during machining process

Customer Benefits:

- Heavy-Duty – Although these fluids do not contain active sulfur, they still provide exceptional EP performance.
- Using this cutting fluid will help safeguard equipment and extend tool life
- Available in three different grades

Applications:

- This lubricant is designed to be used in Machining, metalworking, drill pressing, turning and grinding operations.



Typical Properties

509 Cutting Oil			
Product Number	509	511	Test Method
API	23.78	29.56	-
Specific Gravity	0.9112	0.8786	ASTM 4052
Lbs./Gal	7.589	7.317	-
Density	0.9107	0.8781	-
Flash Point °C (°F)	163 (325)	205 (401)	ASTM D92
Pour Point °C (°F)	-39 (-38.2)	-15 (5)	ASTM D97
Color	<2.5	<1.0	ASTM D1500
Viscosity@100°C cSt	4.324	5.406	ASTM 7042
Viscosity@40°C cSt	28.73	32.91	ASTM D445
Viscosity Index (VI)	9	97	-
Sulfur Total %	0.0	0.0	-
Sulfur Active %	0.0	0.0	-
Chlorine %	0.0	1.5	-
Fat %	2.0	5.3	-

These properties are typical of the current production. Variations that do not affect product performance are to be expected depending on blending and manufacturing locations. The information above is subject to change without notice.

Health and Safety:

This product is unlikely to have any adverse health implications or safety hazards when used for its intended application. Avoid contact with skin, use resistant gloves when handling used oil. If skin comes in contact wash immediately with soap and water. For complete information on safe handling and product characteristics please refer to the Safety Data Sheet (SDS) found on our website. www.royalmfg.com or call (918)-584-2671.

Packaging options:



55 Gal. Drums



275/300 Gal. Totes



Bulk