



Koolkut® 8052B

Phillips 66® Koolkut 8052B is a light-colored, low viscosity, chlorine-free dual-purpose oil formulated for use as a high-performance cutting oil, and hydraulic fluid in metalworking machines.

Koolkut 8052B is formulated with fatty acids, polymers and a chlorine-free extreme-pressure additive package. The combination of extreme-pressure properties and good oiliness characteristics helps minimize cutting tool wear and ensure a good surface finish on the machined parts.

Koolkut 8052B is transparent, allowing good observation of the machining operation. It is non-corrosive to copper and copper alloys and suitable for use on aluminum and ferrous metals including carbon, tool, and stainless steel. The absence of chlorine ensures greater handling safety and safe disposal of waste oil.

Koolkut 8052B is ideal for use in automated machine tools that use one fluid to lubricate the cutting tool/workpiece and the hydraulic pumps and motors. It also is suitable for use in lathes where mixing of the hydraulic fluid and cutting oil may occur. The performance capabilities of most cutting oils are greatly reduced when diluted with typical hydraulic oils. Using Koolkut 8052B as a lubricating oil and cutting oil avoids this problem.

Applications

Koolkut 8052B is recommended for light to heavy-duty machining of ferrous and non-ferrous metals. Typical applications include:

- Free Machining
- Broaching
- Grinding
- Gun Drilling
- Tapping
- Threading
- Turning

Koolkut 8052B is suitable for machining a wide variety of metals ranging from steels with a machinability rating of 90%, to metals such as titanium with machinability ratings below 50%.

Features/Benefits

- Tri-purpose cutting oil, gear oil and hydraulic oil
- Helps extend cutting tool life
- Good surface finish
- Good rust protection
- Non-corrosive to copper and copper alloys
- Chlorine-free for reduced environmental impact
- Transparent for good visibility of the machining operation

**Dual-Purpose
Cutting Oil
Hydraulic Oil**





Koolkut® 8052B

Typical Properties	
ISO Grade	22
Specific Gravity @ 60°F	0.865
Density, lbs/gal @ 60°F	7.20
Color, ASTM D1500	3.0
Flash Point (COC), °C (°F)	166 (330)
Pour Point, °C (°F)	-34 (-30)
Viscosity	
cSt @ 40°C	15.0
cSt @ 100°C	3.9
SUS @ 100°F	73
SUS @ 210°F	39.0
Viscosity Index	168
Acid Number, ASTM D974, mg KOH/g	3.5
Copper Corrosion, ASTM D130	1b
Chlorine, wt %	Nil
Phosphorus, wt %	0.16
Sulfur, wt %	2.1

Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via <http://www.phillips66.com/SDS>.

09-28-2022

Typical properties are average values only and do not constitute a specification. Minor variations that do not affect product performance are to be expected during normal manufacture, and at different blending locations. Product formulations are subject to change without notification.

© Phillips 66 Company. Phillips 66® and its respective logos and products are registered trademarks of Phillips 66 Company in the U.S.A. and other countries.