

PENNZOIL SOLUBLE CUTTING OIL

PRODUCT

PENNZOIL® SOLUBLE CUTTING OIL is a water dilutable metalworking fluid that forms a very stable emulsion when mixed with water over a wide range of dilutions. The stability of this emulsion is not affected by hard water ions. Its non-foaming property makes it ideal for high-speed metalworking operations. The high heat absorbing characteristics of **PENNZOIL® SOLUBLE CUTTING OIL** provides superior cooling for a variety of metalworking applications. It is provide extreme pressure lubrication for heavy-duty operations and tough metals.

APPLICATION

PENNZOIL® SOLUBLE CUTTING OIL is recommended for high speed operations where extreme pressure properties are need, but where straight oil is not capable of providing adequate cooling. Optimum cooling is necessary to carry the heat generated by the process away from the tool, in order to prolong its life and to protect the finish on path produced. **PENNZOIL® SOLUBLE**

DESCRIPTIONS

CUTTING OIL is recommended for use on ferrous metals form cost iron to stainless steel. Since it is non-staining, it is also suitable for used with most copper and aluminum alloys in operations such as sawing, milling, turning, grinding and drilling.

TYPICAL DILUTION RATIOS (OIL-TO-WATER)*

Grinding	1:20	to	1:40
Milling and Turning	1:10	to	1:20
Sawing and Drilling	1:10	to	1:15

*Note: All these dilution ratios are general recommendations only, and should be adjusted to accommodate specific operations.

BENEFITS

- Excellent cooling properties
- Prolongs tool life
- Improves surface finish
- Non-staining
- Resistant to bacterial growth

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES PENNZOIL® SOLUBLE CUTTING OIL

TEST	METHOD	TYPICAL RESULTS
Density @ 30 °C	ASTM D-4052	0.8791
Viscosity @ 40°C, cSt	ASTM D-445	38.50
Copper Strip Corrosion; 3hr @ 100 °C	ASTM D-130	1a