



PETROMIN Solcut Oil is a standard performance, water-soluble cutting fluid designed for general machining. It forms a stable, milky emulsion, providing excellent cooling, lubricity, and corrosion protection for ferrous and various non-ferrous metals. Ideal for a wide range of operations—including turning, drilling, grinding, and milling—this product delivers consistent performance in diverse machining environments.

Benefits

- Enhanced lubricity reduces friction between the tool and workpiece, enabling higher production rates.
- Improved surface finish and excellent corrosion protection help extend tool life and reduce wear.
- Superior cooling properties transfer heat effectively away from the cutting zone.
- A well-balanced mix of base oil, emulsifiers, and coupling agents creates stable, long-lasting emulsions.

Applications

- Ideal for a variety of general-purpose machining operations, including turning, milling, drilling, and tapping.
- Works efficiently on both CNC and manual machines.
- Suitable for use in centralized as well as individual machine coolant sumps.
- Soft water is recommended for best performance.

Recommended Concentrations

Operation	Mild steel	Alloy Steel	Aluminum Alloys
<i>Milling, & Drilling</i>	5-6%	5-6%	5-6%
<i>Reaming Tapping & Screwing</i>	6-8%	8-10%	6-8%
<i>Grinding</i>	3-4%	3-4%	3-4%

Coolant Management System – User Guidelines

- To maximize performance, tool life, and emulsion stability, proper coolant management is essential.
- Follow the steps below for system cleaning, coolant preparation, and ongoing maintenance.

System Cleaning- Machine preparation

- 1) Add 2% system cleaner to the existing cutting fluid and circulate for 48 hours.
- 2) Remove all existing fluids, then flush the system with either water or a very diluted mix of cutting fluid.
- 3) Fill the system to the recommended level with the correct concentration of fluid.

Product Characteristics

Properties	Test Method	Unit	Solcut Oil
Density @ 15 °C	ASTM D4052	kg/L	0.895
Kinematic Viscosity @ 40 °C	ASTM D445	cSt	54.0
pH of 5% Emulsion	Internal	°C	9.3
Emulsion Stability	Visual	-	Pass
<i>Product Code</i>			5390

- * Information, test methods, figures are typical and conform to specification; minor variation may occur.
- * Refer to Owner's Manual for the manufacturer's recommended performance level, viscosity grade, and builder approval requirements.
- * Please refer to the product Safety Data Sheet (SDS) for health, safety, and handling information.

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