



PRO-CHEM-CO, INC.

TECHNICAL DATA

PRO-CUT 211

CHLORINE FREE HEAVY-DUTY SOLUBLE OIL COOLANT

DESCRIPTION:

PRO-CUT 211 is a heavy-duty, chlorine free soluble oil coolant. PRO-CUT 211 has been formulated to **machine** and **grind** both ferrous and non-ferrous metals. State-of-the-art lubrication chemistry enables PRO-CUT-211 to handle **all** machining operations and the toughest of alloys without the use of chlorinated additives. PRO-CUT 211 uses “renewable resources” in its composition.

BENEFITS:

- Non-chlorinated for aerospace/nuclear applications.
- Versatile – Performs all operations.
- Economical – Low end use cost.
- Stable – Performs well in hard or soft water.
- Clean – Unique wetting and emulsion properties produce a clean running, operator-friendly coolant.
- Excellent sumplife and microbe protection.
- Outstanding corrosion protection on cast and steel alloys.
- Outstanding tool life and part finishes.
- Outstanding finishes on aluminum.

OPERATIONS:

- | | | |
|--------------------|-------------|-------------------|
| • Milling/Drilling | • Boring | • CNC Machining |
| • Tapping/Reaming | • Broaching | • Threading |
| • Sawing/Cut-off | • Hobbing | • Screw Machining |

DIRECTIONS FOR USE:

PRO-CUT 211 is always added to water and is emulsifiable and stable at all proportions. The sump should be cleaned with PRO-CHEM-CO machine cleaner and rinsed **before** adding coolant. The proper mixing ratio depends on your operation, metal (s) coolant system and application. The concentration chart below offers a good starting point.

Recommended Starting Dilutions				
OPERATIONS	CARBON STEELS & CAST IRONS	TOOL STEELS	ALUMINUM ALLOYS	HIGH ALLOY AND STAINLESS STEELS
Grinding	3%-5% (1:33-1:20)	3%-5% (1:33-1:20)	3%-4% (1:33-1:25)	4%-5% (1:25-1:20)
CNC Machining	5%-6% (1:20-1:17)	5%-7% (1:20-1:14)	5%-7% (1:20-1:14)	5%-8% (1:20-1:14)
Milling/Drilling Turning Centers Sawing	4%-5% (1:25-1:20)	5%-7% (1:25-1:14)	4%-7% (1:25-1:14)	5%-7% (1:20-1:14)
Tapping/Reaming Boring/Broaching Screw Machining	6%-8% (1:17-1:12)	6%-8% (1:17-1:12)	5%-8% (1:20-1:12)	7%-10% (1:14-1:10)

Note:

We always recommend the use of a refractometer and good coolant management practices.

PROPERTIES:

Appearance ----- Amber Liquid
Odor ----- Mild
Solubility ----- Emulsifiable at All Proportions
pH(5%) ----- 9.2
Specific Gravity -----

PACKAGING:

PRO-CUT 211 is available in 5-gallon pails, 55-gallon drums, totes and bulk.