



# PRO-CHEM-CO, INC.

# TECHNICAL DATA

## PRO-CUT 410

### HEAVY-DUTY SEMISYNTHETIC COOLANT

#### DESCRIPTION:

PRO-CUT 410 COOLANT has been formulated to **machine** and **grind** both ferrous and non-ferrous metals. PRO-CUT 410 combines the lubricity of a soluble oil with the cleanliness of a synthetic coolant in “**one**” product. PRO-CUT 410 forms a “microemulsion” in water whose small particle size optimizes machinability and sumplife.

#### BENEFITS:

- Good toolife
- Outstanding corrosion control.
- Excellent part finishes especially on aluminum alloys.
- Bioresistant to bacteria, molds, and yeast.
- Good tramp oil rejection.
- Excellent cleanliness – keeps machines & parts clean.
- Versatile – one “**all purpose**” coolant.
- Stable – performs well in hard or soft waters.

#### OPERATIONS:

- |                   |                              |                       |
|-------------------|------------------------------|-----------------------|
| • CNC Machining   | • Tube & Pipe Rollforming    | • Central Systems     |
| • Boring/Reaming  | • Surface & Finish Grinding  | • FMS                 |
| • Sawing/Cut-off  | • Milling/Drilling/Profiling | • Light-duty Stamping |
| • Turning Centers | • Tapping                    | • Thread Rolling      |

**DIRECTIONS FOR USE:**

PRO-CUT 410 forms a “pearlescent” microemulsion when added to water, which is 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.

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

**Note:**

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

**PROPERTIES:**

Appearance ----- Dark, Amber Liquid  
Odor ----- Mild  
Solubility ----- Emulsifiable at All Proportions  
pH(5%) ----- 9.1  
Specific Gravity ----- 1.038

**PACKAGING:**

PRO-CUT 410 is available in 5-gallon pails, 55-gallon drums, totes and bulk.