



Product Bulletin



Gulf CUT SOLUBLE HD-NC

High performance machining & grinding fluid

Gulf CUT Soluble HD-NC is a medium-to-heavy duty chlorine-free metalworking fluid with high lubricity. It is formulated to emulsify easily and form a stable, milky emulsion when mixed with water. This product is recommended for machining most Aerospace grade aluminum alloys as well as a wide range of ferrous alloys.

Gulf CUT Soluble HD-NC may be used on most metals except magnesium. It has very low foaming tendency, which is an advantage in high-speed and high-pressure applications. It is suitable for use in many types of machining processes including turning, boring, CNC milling, tapping, threading, and sawing. It also works well in various grinding applications.

FEATURES AND BENEFITS:

- Can replace straight oils in most operations
- Excellent corrosion inhibition
- Better cooling than straight oils
- Improves tool life and surface finish
- Operator friendly
- Reduces disposal costs

Typical Properties

Product Code	Test Method	335196
Refractometer Factor		1.0
Appearance – concentrate		Amber Liquid
Appearance – dilution		Milky Liquid
pH @ 20:1 (5%)		9.8 ± 0.3
Viscosity cSt @ 40°C	ASTM D445	74.0
Viscosity cSt @ 100°C	ASTM D445	9.2
Specific Gravity @ 60°F		.94 ± 0.01
Lbs/Gallon		7.82 ± 0.1
Flash Point, COC, °F		320
Total Chlorine, wt %		Nil

Concentration:	3% (33:1)	4% (25:1)	5% (20:1)	6% (17:1)	7% (14:1)	8% (12:1)	10% (10:1)
Refractometer Reading:	3.0	4.0	5.0	6.0	7.0	8.0	10.0
Recommended Starting Dilutions:	Milling, Drilling, Turning					20:1 (5%)	
	Centerless, ID, OD, Surface Grinding					33:1 (3%)	
	Tapping, Reaming, Sawing					10:1 (10%)	

When mixing coolant, it is best to use an automatic proportioner which accurately and thoroughly mixes coolant. **Always** replenish the coolant with a mixture of coolant and water, not just coolant or water. **Never** add coolant concentrate directly to the sump.

Soluble HD-NC should be stored indoors. Do not store in temperatures below 40°F.

AVAILABILITY: **Gulf CUT Soluble HD-NC** is available throughout Gulf's marketing area. Your Gulf representative can provide specific information. Need additional information? Call Gulf @ 1-800-566-Gulf (4853) or visit Nu-tierbrands.com

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