

# XTREME CUT 291

## Premium Extreme Duty Semi-Synthetic with EP

### Performance Benefits

- Operator friendly- this product has virtually no odor in use and is very mild to the skin
- Unsurpassed tool life and surface finishes
- Non-staining to aluminum
- Excellent corrosion control for ferrous metals and machine tools
- Residue free parts and machine tools
- Extremely low foaming even in high pressure applications and in soft water
- Hard water stability up to 35 grains
- Minimal dermal irritation potential promotes operator acceptance

XTREME CUT 291 is a high performance semi-synthetic fluid designed for extremely difficult machining applications. The product is particularly well suited for difficult aerospace alloys such as Inconel, Titanium, and Stainless Steels. The product is formulated for use on both ferrous and non-ferrous metals where a high level of boundary and extreme pressure lubrication are required. XTREME CUT 291 provides the performance level of heavy-duty soluble oils without the unpleasant odors or high usage rates associated with soluble oils. This unique product combines new proprietary lubricant additives to give the best surface finishes and tool life of any water based metalworking fluid on the market. Due to the amount of lubricity, XTREME CUT 291 has been able to replace straight oils where other water dilutable products have failed. XTREME CUT 291 has excellent bioresistance resulting in long fluid life in both central systems and individual sumps. The product also exhibits a tight, stable emulsion that imparts excellent tramp oil rejection and product stability.

### Typical Characteristics

Appearance of concentrate	Clear, amber viscous liquid
Appearance of emulsion	Translucent
Density	8.22 lbs./gal
Specific gravity	0.975-0.995
pH of 5% emulsion	8.8-9.2
Diethanolamine, Formaldehyde release biocides, Nitrite, Phenols, Phosphates, Silicones, Sulfur	None

### Recommended Dilutions

XTREME CUT 291 is to be mixed with water for use (add concentrate to water)

Grinding:	3 - 5%
Machining:	4 - 12%

### Concentration Control

The chart below was prepared using an Atago Master M refractometer and dilutions of XTREME CUT 291 in distilled water. Refractometer readings can vary with the type of water and refractometer used. Atago Master M refractometers are available from QualiChem, Inc.

CONCENTRATION %:	3	4	5	6	7	8	10	12
REFRACTOMETER READING:	3.0	4.0	5.0	6.0	7.0	8.0	10.0	12.0

### Packaging

XTREME CUT 291 is packaged in 310-gallon, one-way tote tanks and 55-gallon, non-returnable steel drums. Bulk and 5-gallon pails are also available.

**QUALICHEM**  
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