



## TOWERCOOL 457-HD

**TOWERCOOL 457-HD** is a heavy duty semi-synthetic designed for use in metalworking of ferrous and non-ferrous metals. **TOWERCOOL 457-HD** is recommended for a wide range of machining and grinding operations. Because **TOWERCOOL 457-HD** contains some mineral oil, it provides the benefits of oil while offering the advantages of a pure chemical solution.

### USAGE

**TOWERCOOL 457-HD** is designed to be used as a coolant and lubricant for cutting and grinding operations. It is generally compatible with a broad range of water hardness and will form a stable microemulsion with minimal mixing. For best results, premix **TOWERCOOL 457-HD** by adding concentrate to water with agitation.

Starting water dilutions for machining operations are 15:1 to 20:1. For grinding operations, the suggested starting dilution is 20:1 to 25:1.

### PHYSICAL CHARACTERISTICS

Density	1.02 g/ml	8.5 lbs/gal
Appearance	Golden Yellow Liquid	
Odor	Mild	
pH	9.6 (@5% in water)	
	9.7 (Concentrate)	
Refractive Index	7.1 @ 5:1	3.9 @ 10:1 2.7 @ 15:1
(freshly diluted)	2.1 @ 20:1	2.0 @ 25:1

### BENEFITS

- Does NOT Contain DEA, Sulfur, Nitrites, Phenols or PCB's
- Provides Extended Sump Life Against Microbial Attack & foul Odors
- Provides Enhanced Lubricity by use of EP Additives
- Provides Excellent Cooling for Tool & Work piece
- Has Excellent Rust Protection for Machine & Parts
- Cleans Easily in Low Temperature Water-Based Cleaning Operations

### TECHNICAL SUPPORT

TOWER wants to assist you in evaluation and selection of suitable products. We urge you to take advantage of this service. This information sheet and TOWER'S assistance, however, are not a substitute for your own testing and evaluation.

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