

# STARCHEM

## StarBright™ 480

### *Semi-Synthetic Machining and Grinding Fluid Concentrate*

#### GENERAL DESCRIPTION

**StarBright 480** is a premium semi-synthetic, machining and grinding fluid. This product has been specifically formulated for use where hard water conditions exist. **StarBright 480** contains a combination of high quality mineral oils, and extreme pressure lubricants to provide excellent lubricating properties in both ferrous and non-ferrous applications.

#### APPLICATION

**StarBright 480** is recommended for a wide variety of moderate to heavy duty metalworking operations including CNC milling, turning, drilling, boring, tapping, threading, and grinding. It is compatible with a wide range of materials including cast iron, nodular iron, carbon steels, high speed steels, high alloy steels, and most aluminum alloys. It is not recommended for use on magnesium or alloyed magnesium. **StarBright 480** is a true, multi-purpose product that is ideally suited for those customers that prefer to use one metalworking fluid throughout the shop. It can be used in “stand-alone” machines and central systems.

#### ADVANTAGES

- Designed for use in systems with high water hardness, typically exceeding 400ppm
- Excellent lubricity in a variety of operations and a variety of metals
- Low odor and mist
- Superior rancidity control for long sump life

#### PHYSICAL PROPERTIES

Form	Clear Liquid	Specific Gravity (H <sub>2</sub> O=1)	1.00
Boiling Point	212°F	pH (concentrate)	9.4
Flash Point (COC)	NA	Typical Operating pH	8.9
Solubility in Water	100% Miscible	Refractometer Factor	1.7

#### AVAILABILITY

**StarBright 480** is available in 5-gallon pails, 55-gallon drums, and in bulk.

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### RECOMMENDED STARTING DILUTIONS

Grinding	5% - 10%
Machining	5% - 10%

### MIXING INSTRUCTIONS

Always add **StarBright 480** concentrate to water. Mix concentration can be determined using a refractometer.

#### StarBright 485 CONCENTRATION

Concentration	4% (1:25)	5% (1:20)	6% (1:17)	7% (1:14)	8% (1:13)	9% (1:11)	10% (1:10)
Refractometer Reading	2.4	2.9	3.5	4.1	4.7	5.3	5.9

Using premixed concentrate as makeup will improve performance and reduce usage. The specific makeup concentration selected for your situation should balance the water evaporation rate with the coolant carry-off rate. Adding makeup concentrate at 30-50% of the desired working concentration will generally maintain the proper concentration in use.

### HEALTH & SAFETY

The most recent MSDS is available from either **STARCHEM** or your authorized **STARCHEM** Distributor.

### NOTES

- Consult **STARCHEM** before using this product on any metals or applications not specifically recommended
- Do not use any metalworking fluid additives except as recommended by **STARCHEM**
- The general description, recommended uses, application data and statements in the product literature are guidelines. Because this product may be used for a variety of applications over which the manufacturer has no control, the manufacturer assumes no liability for incidental, consequential, or direct damages of any kind, regardless of causes, including negligence.

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