

STARCHEM

StarBright 495

Semisynthetic Cutting and Grinding Fluid Concentrate

GENERAL DESCRIPTION

StarBright 495 is a BIORESISTANT, premium cutting and grinding fluid for heavy-duty metalworking applications. **StarBright 495** contains a unique and proven combination of high quality mineral and vegetable oils, and extreme pressure lubricants that provides excellent tool life and surface finish. This product was primarily designed for machining of cast and wrought aluminum alloys, but also provides superior performance in ferrous applications. **StarBright 495** has also been formulated to significantly extend fluid life without relying on sump-side additions of expensive additives.

APPLICATION

StarBright 495 is recommended for a wide variety of heavy-duty metalworking operations including drilling, boring, tapping, threading, milling, turning, and grinding. It is compatible with a wide range of materials including aluminum alloys, steels, and cast irons. **StarBright 495** 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

- Excellent lubricity on aluminum alloys and ferrous metals
- Superior rancidity control for long sump life
- Superior corrosion control
- Extremely clean
- Low odor and mist

StarBright 495 does not contain nitrite, sulfur, dicyclohexylamine or phenolic biocides.

PHYSICAL PROPERTIES

Form	Clear Liquid	Specific Gravity (H₂O=1)	1.02
Boiling Point	212°F	pH (concentrate)	8.7
Flash Point (COC)	NA	Typical Operating pH Range	8.8 – 9.0
Solubility in Water	100% Miscible	Refractometer Factor	1.3

AVAILABILITY

StarBright 495 is available in 5-gallon pails, 55-gallon drums, and in bulk.

RECOMMENDED STARTING DILUTIONS

Milling, Drilling, Turning	6% - 8%
Tapping, Reaming, Sawing	8% - 10%
Grinding	5% - 7%

MIXING INSTRUCTIONS

Always add **StarBright 495** concentrate to water. Mix concentration can be determined using a refractometer.

StarBright 495 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	3.1	3.8	4.6	5.4	6.2	6.9	7.7

StarBright 495 is not recommended for use on magnesium or alloyed magnesium.

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. The use of deionized or mineral-free water will also improve performance, prolong sump life, and reduce concentrate usage.

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 **STARCHEM, Inc.** has no control, **STARCHEM, Inc.** assumes no liability for incidental, consequential, or direct damages of any kind, regardless of causes, including negligence.

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