

# STARCHEM

## StarCool 101B

### *Synthetic Cutting and Grinding Fluid Concentrate*

#### GENERAL DESCRIPTION

**StarCool 101B** is a synthetic cutting and grinding fluid designed for nonferrous materials, and particularly for those shops that prefer to use an oil-free product. It has been formulated to provide excellent cooling and corrosion inhibition properties in light duty grinding and machining of copper, brass, and bronze alloys for “stand-alone” machines and central systems.

#### APPLICATION

**StarCool 101B** is ideal for grinding applications such as centerless, ID, OD, and Blanchard grinding. It is extremely low foaming, making it an excellent choice for high pressure applications. **StarCool 101B** can also be used for light duty machining.

#### ADVANTAGES

- Extremely low foaming in high pressure and flood type applications
- Excellent corrosion and microbial control
- Low odor and mist
- Rejects tramp oil for long sump life
- Oil free for easy recycling or disposal
- Low carry off for reduced concentrate usage
- Clear mix for good part visibility

**StarCool 101B** does not contain nitrite, chlorine, silicone, or phenolic biocides.

#### PHYSICAL PROPERTIES

<b>Form</b>	Clear Liquid	<b>Specific Gravity (H<sub>2</sub>O=1)</b>	1.02
<b>Boiling Point</b>	212°F	<b>pH (concentrate)</b>	8.3
<b>Flash Point (COC)</b>	NA	<b>Typical Operating pH Range</b>	8.0 – 8.2
<b>Solubility in Water</b>	100% Miscible	<b>Refractometer Factor</b>	5.0

#### AVAILABILITY

**StarCool 101B** is available in 5-gallon pails, 55-gallon drums, and in bulk.

**RECOMMENDED STARTING DILUTIONS**

Centerless, ID, OD, Surface Grinding ..... 5%  
Light Machining ..... 6%

**MIXING INSTRUCTIONS**

Always add **StarCool 101B** concentrate to water. Mix concentration can be determined using a refractometer.

**StarCool 101B CONCENTRATION**

<b>Concentration</b>	<b>3% (1:33)</b>	<b>4% (1:25)</b>	<b>5% (1:20)</b>	<b>6% (1:17)</b>	<b>7% (1:14)</b>
<b>Refractometer reading</b>	0.6	0.8	1.0	1.2	1.4

**StarCool 101B** 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 20-30% 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 the manufacturer has no control, the manufacturer assumes no liability for incidental, consequential, or direct damages of any kind, regardless of causes, including negligence.

**CIMCOOL® FLUID TECHNOLOGY**

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