

STARCHEM

StarCool 101

Synthetic Cutting and Grinding Fluid Concentrate

GENERAL DESCRIPTION

StarCool 101 is a synthetic cutting and grinding fluid designed for ferrous 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 ferrous metals for “stand-alone” machines and central systems.

APPLICATION

StarCool 101 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 101** can also be used for light duty machining of cast iron and mild steels. It is not recommended for non-ferrous metal applications.

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

PHYSICAL PROPERTIES

Form	Clear Liquid	Specific Gravity (H₂O=1)	1.05
Boiling Point	212°F	pH (concentrate)	10.1
Flash Point (COC)	NA	Typical Operating pH Range	8.8 – 9.2
Solubility in Water	100% Miscible	Refractometer Factor	3.6

AVAILABILITY

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

RECOMMENDED STARTING DILUTIONS

Centerless, ID, OD, Surface Grinding 5% - 6%
 Light Machining 6% - 7%

MIXING INSTRUCTIONS

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

StarCool 101 CONCENTRATION

Concentration Ratio	4% 1:25	5% 1:20	6% 1:17	7% 1:14	8% 1:13	9% 1:11	10% 1:10
Refractometer Reading	1.1	1.4	1.7	1.9	2.2	2.5	2.8

StarCool 101 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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