

# STARCHEM

## StarSol 775AL

### *Premium Soluble Oil Cutting Fluid Concentrate*

#### GENERAL DESCRIPTION

**StarSol 775AL** is a BIORESISTANT, premium soluble oil for heavy-duty metalworking applications. This product contains an effective combination of high quality mineral and vegetable oils, and extreme pressure lubricants that provide excellent surface finish and improved tool life on tough-to-machine, high-silicon aluminum alloys. **StarSol 775AL** has been specifically formulated to significantly extend fluid life without relying on sump-side additions of expensive biocides.

#### APPLICATION

**StarSol 775AL** is recommended for wide variety of metalworking operations including CNC milling, turning, drilling, boring, tapping and reaming of aluminum alloys. This product can be used in “stand-alone” machines and central systems. **StarSol 775AL** exhibits low foam characteristics in soft water and high-pressure applications.

#### ADVANTAGES

- Wide application range
- Superior microbial control for long sump life
- Excellent lubricity
- Low foam and odor
- Reduced need for additives

**StarSol 775AL** does not contain nitrite, dicyclohexylamine or phenolic biocides.

#### PHYSICAL PROPERTIES

<b>Form</b>	Clear, Amber Liquid	<b>Specific Gravity (H<sub>2</sub>O=1)</b>	0.96
<b>Boiling Point</b>	NA	<b>pH (concentrate)</b>	NA
<b>Flash Point</b>	350°F	<b>Typical Operating pH Range</b>	8.8 – 9.1
<b>Solubility in Water</b>	100% Miscible	<b>Refractometer Factor</b>	1.0

#### AVAILABILITY

**StarSol 775AL** is available in 5-gallon pails, 55-gallon drums, and in bulk.

**RECOMMENDED STARTING DILUTIONS**

Milling, Drilling, Turning	5% - 7%
Boring, Tapping, Reaming	8% - 12%

Extremely heavy duty applications may require higher concentrations.

**MIXING INSTRUCTIONS**

Always add **StarSol 775AL** concentrate to water. Mix concentration can be determined using a refractometer.

**StarSol 775AL CONCENTRATION**

<b>Concentration</b>	<b>4%</b> <b>(1:25)</b>	<b>5%</b> <b>(1:20)</b>	<b>6%</b> <b>(1:17)</b>	<b>7%</b> <b>(1:14)</b>	<b>8%</b> <b>(1:13)</b>	<b>9%</b> <b>(1:11)</b>	<b>10%</b> <b>(1:10)</b>
<b>Refractometer Reading</b>	4.0	5.0	6.0	7.0	8.0	9.0	10.0

**StarSol 775AL** is not recommended for use on 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.

This product is to be used within six months of its manufacture date as indicated by the lot number on the container label.

**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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