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Product Code: IC 0689

**SARCOOL ULTRA LF** is a medium oil content, bio-stable, water soluble cutting fluid for applications where machining performance characteristics and low foaming are required.

## BENEFITS

- Outstanding lubricity and extreme pressure properties.
- Based on highly developed synthetic ester technology.
- Free from chlorine EP, sulphur EP and phosphorus.
- Free from secondary amines, nitrites and phenols for the most stringent health and safety requirements.
- Compatible for use with aluminium and its alloys, titanium alloys, tensile and stainless steel, carbon fibre and other non-ferrous materials.
- Widely used for aerospace applications, typically 2000, 6000 and 7000 series.
- Forms a stable milky emulsion in waters up to 400ppm CaCO3 hardness.
- Outstanding resistance to bacterial and fungal degradation.
- Ultra low foaming characteristics, achieved with silicone-free anti foam technology.
- Suitable for both high and low pressure CNC systems.

## APPLICATIONS

(Recommended treat rate 5-10% in water, depending on severity of application. Minimum treat rate 5% in water)

	Turning	Drilling Milling	Sawing	Grinding	Honing	Lapping	Threading	Deep Hole Drilling	Broaching
Steel	✓	✓	✓	✓			✓	✓	
Stainless Steel	✓	✓	✓	✓			✓	✓	
High Alloy Steel	✓	✓	✓	✓			✓	✓	
Titanium	✓	✓	✓	✓			✓	✓	
Carbide									
Cast Iron	✓	✓	✓	✓			✓		
Copper Alloys	✓	✓	✓	✓			✓		
Aluminium Alloys < 7% Si	✓	✓	✓	✓			✓	✓	
Aluminium Alloys > 7% Si	✓	✓	✓	✓			✓	✓	
Plastic	✓	✓	✓	✓					

Water hardness should be checked to determine optimum running concentrations, please consult your SAR Lubricants Sales Engineer for further details.

## TYPICAL PROPERTIES

Appearance	Forms a milky emulsion in water
Specific Gravity @ 15°C:	0.95
Mineral oil content %:	50
pH (5% solution)	9.0-9.4
IP 287 Corrosion Test	2.5
Defoam ml (5% in 50ppm water)	Nil (30 seconds)

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## FLUID MAINTENANCE

Refractive Index: - 1.1 = % / ° Brix

<i><b>Refractometry data for Sarcool Ultra LF</b></i>	
<i><b>Refractometer reading</b></i>	<i><b>Actual Concentration</b></i>
0	0
1	1.1
2	2.2
3	3.3
4	4.4
5	5.5
6	6.6
7	7.7
8	8.8
9	9.9
10	11.0
11	12.1

## HEALTH & SAFETY, STORAGE AND DISPOSAL

**SARCOOL ULTRA LF** should be stored in dry conditions and protected from extreme temperatures: between 4°C and 35°C is the recommended storage temperature.

**SARCOOL ULTRA LF** is unlikely to present any significant health or safety hazard when used as recommended by SAR Lubricants. Good standards of personal and industrial hygiene are to be maintained by the user (see Material Safety Data Sheets). In order to protect the environment, the product used should be safely disposed by a licensed contractor. The packaging material should be handled by a recognised reconditioning firm.

Prior to using this product, consult the Material Safety Data Sheet for instructions regarding safe handling and environmental issues. The information contained herein is based on data available to us and is believed to be accurate.

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