

Last Updated: 14.08.2017

Product Code: IC 0680

SARCOOL 431 AF is a premium quality, bio-stable, semi-synthetic soluble cutting fluid designed to have very low foaming properties in soft water areas.

BENEFITS

- Forms a translucent micro emulsion in most waters.
- Compatible with most water qualities up to 400ppm calcium carbonate.
- Highly resistant to bacterial and fungal degradation, giving freedom from bad smells or slimy deposits.
- Offers good corrosion inhibition to ferrous metals.
- Good resistance to contact corrosion thus allowing work pieces to be stacked without staining.
- Chlorine, nitrite, phenol and formaldehyde free and based on highly refined mineral oil, thus giving optimum operator acceptability.
- Contains specially developed silicone-free anti-foam additives to overcome foaming in high-pressure systems using soft or de-ionised water.
- Creates minimal sticky residues that can easily be washed away with water.

APPLICATION

(Recommended treat rate 3-8% in water, depending on severity of application. For most general purpose work, a treat rate of 4-6% is normally acceptable. Minimum treat rate 3% 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 translucent liquid emulsion
pH (4% emulsion)	9.0-9.4
IP 287 Breakpoint	70:1
IP 125 Corrosion Test	130:1 (no rust)

1/2

FLUID MAINTENANCE

Refractive Index: - 1.30 = % / ° Brix

<u>Refractometry data for Sarcool 431 AF</u>	
<u>Refractometer reading</u>	<u>Actual Concentration</u>
0	0
1	1.30
2	2.60
3	3.90
4	5.20
5	6.50
6	7.80
7	9.10
8	10.40
9	11.70
10	13.00
11	14.30

HEALTH & SAFETY, STORAGE AND DISPOSAL

SARCOOL 431 AF should be stored in dry conditions and protected from extreme temperatures: between 4°C and 35°C is the recommended storage temperature.

SARCOOL 431 AF 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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