

TECHNICAL DATA SHEET



Last updated: 19.01.2016

Product Codes: RCSCOU

RUNCOOL ULTRA is a high oil content, bio-stable, water soluble cutting fluid for applications where maximum EP performance and low foaming are required.

BENEFITS

- Outstanding lubricity and extreme pressure properties.
- Based on highly developed synthetic ester technology.
- Chlorine-free.
- Free from secondary amines, nitrites and phenols for the most stringent health and safety requirements.
- Low staining potential on aluminium and its alloys.
- Widely used for aerospace applications.
- Forms a stable milky emulsion in waters up to 400ppm CaCO₃ hardness.
- Outstanding resistance to bacterial and fungal degradation.
- Good rejection of tramp oil.
- Low foaming characteristics, achieved with only silicone free anti-foams.
- Found to be particularly effective in preventing rusting when machining cast iron.

APPLICATIONS

(Recommended treat rate 5-10% in water, depending on severity of application. For most general purpose work, a treat rate of 6-8% is normally acceptable. 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 MTO Lubricants sales engineer for further details.

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Registered In England 08809951 VAT Registration No. GB 184 4633 89



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TYPICAL PROPERTIES

Appearance:	Forms a milky emulsion in water
Specific Gravity @ 15°C:	0.92
Viscosity @ 40°C (mm ² /sec)	150-300
pH (4% solution)	9.0 – 9.4
IP 287 Breakpoint	40:1
IP 125 Corrosion Test	50:1

FLUID MAINTENANCE

Refractive Index: - 1.05 = % / °Brix

Refractometry data for Runcool Premium	
Refractometer reading	Actual Concentration
0	0
1	1.05
2	2.10
3	3.15
4	4.20
5	5.25
6	6.30
7	7.35
8	8.40
9	9.45
10	10.50
11	11.55

HEALTH & SAFETY, STORAGE AND DISPOSAL

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

RUNCOOL ULTRA is unlikely to present any significant health or safety hazard when used as recommended by MTO 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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MTO Lubricants assumes no liability for any alleged ineffectiveness of the product or any injury or damage, direct or consequential, resulting from the use of this product unless injury or damage is solely attributable to negligence on the part of MTO Lubricants.

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