

SARCOOL ULTRA is a high oil content, bio-stable, water soluble cutting fluid for applications where maximum EP performance and low foaming are required. The optimised lubricity and extreme pressure package delivers excellent surface finish and tool life on difficult to machine aluminium alloys, inconel, titanium, stainless and high tensile strength steels.

APPLICATION

Applications — boring, centreless grinding, deep hole drilling, drilling, heavy duty machining centre work, high-pressure, high-volume, high-speed milling, high-speed turning, milling, reaming, roll threading, sawing, tapping, thread forming, thread rolling and turning.

Metals — aerospace aluminium alloys, brass, bronze, cast aluminium, composites, copper, exotic alloys, heat-treated steel, high tensile-strength steel, high-carbon steel, nickel alloys, plastics, stainless steels and titanium.

Industries — aerospace, automotive and energy

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

PERFORMANCE PROFILE

Recommended Metalworking Concentrations

Light Duty	5.0% – 6.0%
Medium Duty	7.0% – 8.0%
Heavt Duty	8.0% – 10.0%
Design Concentration Range	3.0% – 10.0%

TYPICAL PROPERTIES

Appearance (Concentrate)	Amber liquid
Appearance (Emulsion)	Milky
pH (5% emulsion)	9.0 – 9.4
IP 287 Breakpoint	2.0%
Mineral Oil Content	High
Refractometer Conversion Factor	1.0
Make Up Water Hardness	80 – 400 ppm

FLUID MAINTENANCE

To check and maintain fluid concentration a refractometer is recommended, the resulting reading multiplied by the refractometer conversion factor will give the actual concentration strength. Maintaining a consistent concentration is paramount to prolonging the fluid sump life. To promote long service life, it is strongly advised that coolant systems are thoroughly sterilised with a System Cleaner prior to coolant changes (see Sarsol System Cleaner Technical Data Sheet for further information and guidelines).

Further tests for bacteria, fungus, pH and tramp oil contamination are available through our Cooltrak Fluid Management Service. This service offers guidance and assistance for users to comply with current HSE legislative requirements. Please contact us for further details.

HEALTH & SAFETY, STORAGE AND DISPOSAL

Please refer to the Safety Data Sheet, freely available, for product handling and disposal advice. Please note that the SDS includes handling, storage, health and disposal information which should be passed on to anyone else who comes in contact with our product. Additional advice can also be obtained from your local representative.

NOTE: Read and understand all precautions on container labels before using this product.