Metcut
METALWORKING FLUIDS

METAL WORKING SOLUTIONS

SUPERCUT 7150

BIOSTABLE HIGH OIL EP COOLANT

DESCRIPTION

SUPERCUT 7150 is a biostable, semi-synthetic, micro-emulsion cutting fluid incorporating the latest performance additives. It has a high oil content and high lubricity, which coupled with chlorine free extreme pressure additives ensures excellent machine performance. When diluted with most mains waters at the recommended ratio, a translucent emulsion is formed that gives good workpiece visibility. The high lubricity of this product, coupled with its biostability and tolerance to tramp oil, makes **SUPERCUT 7150** an excellent coolant for workshop rationalisation. Carefully selected corrosion inhibitors ensure rust and stain free performance on all metals including steels, brasses and aluminium.

FEATURES / BENEFITS

- **HIGH OIL AND LUBRICITY**
- **WIDE RANGE OF MACHINING APPLICATIONS**
- **CHLORINE FREE**
- **EXTENDED COOLING**
- **MULTI-METAL COMPATIBILITY**
- **RESISTS TRAMP OIL**

RECOMMENDED CONCENTRATION

CAST IRON	3%
FREE CUTTING STEELS	4%
STAINLESS STEELS	5 - 7%
ALUMINIUM ALLOYS	4 - 6%
GRINDING	2.5 - 3%

AREAS OF APPLICATION

SUPERCUT 7150 is suitable for machining of all ferrous metals up to and including high tensile and stainless steels and most non-ferrous alloys. Recommended for medium and high speed machining operations and some grinding operations. It can be used to replace many other fluids in machine shops where rationalisation is desired and is particularly suitable for modern machining centres and flexible manufacturing systems.

SUPERCUT 7150 has been successfully used on a wide range of applications involving aluminium alloys with excellent results in terms of machining tolerances, surface finish and tool life.

PHYSICAL CHARACTERISTICS*

Appearance (Emulsion)	Amber translucent
Relative Density @ 15.6°C	0.998
pH neat	9.5
pH 2% in 200 ppm hardness water	9.0
Corrosion Breakpoint IP 287	1.6% (60:1)

- Typical values not defining a specification

Metcut - The Metalworking Division of Morris Lubricants
Castle Foregate, Shrewsbury, Shropshire SY1 2EL, England.Tel: +44 (0) 1743 232200, Fax: +44 (0) 1743 353584.
www.metcut.co.uk

MORRIS LUBRICANTS
Established 1869

Certificate No. FM 21756
BS EN ISO 9002 1994

COOLANT MONITORING

DILUTION

For hand mixing, always dilute to the required strength by adding the coolant concentrate to drinking quality water, and not in the reverse order. Metering or dosing equipment can carry out this function automatically. Freshly prepared dilutions can easily be checked for concentration using a pocket refractometer.

Dilutions used for topping up frequently require to be adjusted to a lower concentration than the working strength to accommodate for drag-out and evaporation loss. **Never top up with plain water alone.**

For working coolants, not too heavily contaminated with tramp oils, a reasonably accurate estimate of sump strength can be obtained.

REFRACTOMETER READING (% brix scale)	1	2	3	4	5	7.5	10	15
CONCENTRATION OF COOLANT (%V/V)	0.8	1.9	3	4	5	7.5	10	15
APPROX STRENGTH COOLANT:WATER	1:100	1:50	1:30	1:25	1:20	1:15	1:10	1:7.5

HEALTH AND SAFETY

MSDS No 1060 refers

COOLANT CARE

Following a few straightforward good housekeeping practices will ensure a trouble free working life.
Start with a clean coolant system - purged with a good systems cleaner (**SUPERCLEAN DD1 AND SUPERCLEAN KD 150 SYSTEM CLEANERS).** Charge the sump with fresh coolant at the correct dilution for the operation and regularly monitor the concentration. Periodically remove, by suction filtration, metal fines and sludges, particularly in mixed metal machining.

Tramp Oils arise from positive loss lubricators, oily stock, hydraulics, etc. If allowed to build up in the system, tramp oils are the **most frequent cause of performance loss.** Their presence leads to bacterial degradation, de-emulsification, souring (pH drop) corrosion and poor finishes.
On machines standing idle, anaerobic spoilage can be prevented by recirculating the coolant a few hours twice weekly.