

Technical Data



TUFCUT AQUA WATER SOLUBLE SEMI-SYNTHETIC CUTTING FLUID



TUFCUT AQUA is a semi synthetic cutting fluid for cutting operations on all types of metal parts (steel, copper, aluminium, stainless steel, etc...).

Tufcut Aqua significantly extends the life time of the cutting tool and gives a superb anti-corrosion coating the machined parts. Cuttings and swarf are easily removed.

Tufcut Aqua remains usable considerably longer than traditional fluids due to specifically developed active lubricating components

- Rapid removal of cuttings, maintaining a clean lubricating fluid and allowing increased cutting speeds.
- Transparent solution allows a clear view of the machining operation.
- The cutting fluid contains excellent surfactants, helping to maintain tool cleanliness.
- Easy to clean at low temperatures with Ambersil Aquasafe.
- Does not contain nitrites or heavy metals.

APPLICATIONS

Suitable for a wide range of cutting operations (see table below).

DIRECTIONS

To set up a cutting fluid reservoir, add Tufcut Aqua to water at the percentages indicated in the following table:

Cutting operation	Metals to be machined				
	Steel	Cast Iron	Aluminium	Bronze	Stainless Steel
Boring out	4-6%	4-6%	5-7%	4-6%	5-7%
Drifting	6-10%	6-8%	6-10%	6-10%	6-10%
Thread cutting with chisel	4-6%	4-6%	5-7%	4-6 %	5-7%
Drilling	6-10%	6-8%	6-10%	6-10%	6-10%
Milling	4-6%	3-5%	4-6%	3-5%	4-6%
Mortising	6-10%	6-8%	6-10%	6-10%	6-10%
Piercing	4-6%	4-6%	5-7%	4-6%	5-7%
Planing	4-6%	4-6%	5-7%	4-6%	4-6%
Grinding	2-3%	2-3%	2-3%	2-3%	2-3%
Sawing	4-6%	4-6%	5-7%	5-7%	4-6%
Edge cutting with moulds	4-6%	4-6%	5-7%	4-6%	5-7%
Edge cutting with chisel	6-10%	6-8%	6-10%	6-10%	6-10%
Thread cutting	6-10%	6-8%	6-10%	6-10%	6-10%
Turning	4-6%	3-5%	4-6%	3-5%	4-6%
Cutting of cylinders	4-6%	4-6%	4-6%	4-6%	4-6%

The concentration of the cutting fluid can be controlled by measuring the refractive index on a daily basis and comparing with the following table:

Refractometer display	1.5	2.2	3.0	3.7	4.4	5.2	5.9	6.7	7.4
Concentration in %	2	3	4	5	6	7	8	9	10

Check the pH of the fluid at weekly intervals, check for bacterial growth on a monthly basis.

TECHNICAL DATA

Appearance	: Clear amber liquid
Density	: 1.1
Flash Point	: Non-Flammable
pH of Concentrate	: 9.5
pH of a 5% Solution	: 9
Viscosity @ 20 °C	: 32.6 mm ² /s
@ 40 °C	: 13.3 mm ² /s
Saponification Factor	: 65 mg KOH/g
Extreme Pressure Property	: with charge: 80 daN – imprint: 0.6 mm
Packaging	: 2 x 5Ltr, 1 x 25Ltr

STORAGE

The product may be stored at normal ambient temperatures and has a shelf life of not less than 36 months with correct storage.

HEALTH AND SAFETY

Health and Safety sheet available separately.

TECHNICAL SERVICE

CRC Industries UK Ltd provides a technical support service and maintains a constant programme of research and development. We are able to assist customers with specific product enquiries and requests for technical information.

MISREPRESENTATION ACT 1967

TRADE DESCRIPTIONS ACT 1968

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