



MET-L-COOL

Cut Machining Costs. Power Profits

BIOCOOL-100

BIOCOOL-100 is high performance environment friendly, long life semi-synthetic metal working fluid, suitable for all moderate machining and grinding operations on all ferrous and its alloy metals. Formulated with high performance extreme pressure additives, corrosion inhibitor package and biocides, **BIOCOOL-100** is designed to give good sump life with better tool life.

Features & Benefits

- ▶ No hazardous materials like Chromates, Nitrites, Phosphates, Sulphates and Free Chlorine
- ▶ Corrosion inhibitor package protects the job and machine from rusting
- ▶ Reduces wheel loading and dressing frequency
- ▶ Reduces machine downtime
- ▶ Reduced disposal and labour costs

• **Longer sump life**
• **Less top up compared to other coolants**

Directions for use

BIOCOOL-100 should be diluted with water in the range of 10:1 to 60:1 depending upon the severity of the operation, work piece material and water hardness. The following practices help in achieving the full benefits of the product:

- ▶ Always add oil to water and never the other way
- ▶ Usage of low hardness (< 100 ppm), Low chlorides (< 30 ppm) water
- ▶ Never add product directly to the sump. Add in the emulsion form
- ▶ Always clean the sump thoroughly before a fresh charge.

Typical Properties

Attributes	Ref. Method	Specifications
Appearance	Visual	Pale yellow thick liquid
Odour		Mild odour
Specific gravity @ 27°C	ASTM D 1298	0,99 +/-0.02
Viscosity @ 37.8°C	ASTM D 445	120 +/-10 CST
Emulsion type	Visual	Translucent
Emulsion stability test 5% in 400 ppm hard water	Internal	To Pass
PH of 5% solution	Internal	9.7 - 10.5
Foam depression (in secs) 5% in D.M. water	IP 312/74	20 sec max
Cast iron corrosion test 3% in 200 ppm	IP 287	Less than 1%
Hand refractometer reading (1: 20)	Internal	3.6 +/- 2.0
Oil content		30% max
HMIS Rating		
Health: 1	Reactivity: 1	Flammability: 0

Metal Compatibility		Operation	Concentration
Ferrous	Yes	Drilling	1: 15
Aluminum	Yes	Broaching	1: 10
Brass/Copper	Yes	Grinding	1: 25
Titanium	No	Tapping	1: 10
Magnesium	No	Milling	1: 25
		Boring	1:15

Pack size: Available in 20 & 205 ltr drums

Note: For more details on storage and disposal please refer to material safety data sheet available on www.itwchemin.com

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ISO 9001

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