

BIOCOOL 3820

BORON FREE METALWORKING FLUID

Synthetic solution

DESCRIPTION

BIOCOOL 3820 is a mineral oil free, water soluble synthetic metalworking fluid concentrate recommended for applications which require high cooling and lubricating properties. The product is designed for light duty grinding and machining applications. Biocool 3820 can be used for Cast Iron, Steel, Alloy Steel and also for yellow metals and standard Aluminium alloys.

APPLICATIONS

BIOCOOL 3820 is a general purpose synthetic oil. The product forms a clear and stable solution with good pH stability and low foaming behaviour in soft water. The solution exhibits excellent microbiological control, with good anti corrosion properties, leaves the metal fines settled in the tank, providing clean solution in the operating zone.

Biocool 3820 is recommended for grinding and light duty machining operations on ferrous metals, yellow metals & copper alloys and aluminum. The product is free from formaldehyde release agents, Boron and Nitrites. It is advisable to check for compatibility of the solution for stains with Aluminium, Copper and Yellow metals before use.

ADVANTAGES

- Excellent cooling and detergency properties
- Very good lubricity
- Low foaming product
- Good separation of tramp oils
- Very good particles settling properties
- Excellent bio stability in use

TECHNICAL INFORMATION

TECHNICAL CHARACTERISTICS	UNITS	METHOD	BIOCOOL 3820
Color	-		Yellow
Density	-	ASTM D4052	1.055
pH	-	NFT 60.193	9.6 at 5 %
Break Point Corrosion	%	IP 287	4
Refractometer Factor	-		2.1
Water Hardness range	ppm		0-600

These characteristics are given only for information and can be updated over time.

RECOMMENDED CONCENTRATIONS OF USE

- Grinding: 3-5 %
- General machining of iron and steel: 5-8 %
- General machining of aluminium & copper alloys: 6-10 %
- Machining of hard metals and titanium: 8-12 %

HEALTH AND SAFETY

- Formaldehydes & formaldehydes releasers free
- Boron, nitrites and DEA free, without chlorinated, phosphorous and sulfur additives
- Operator friendly : Good dermatological behavior and easy to use

INSTRUCTIONS

Before first fill, thoroughly clean the installation with an antiseptic such as **Contram CB3**. Drain and rinse the system with water.

If no volumetric mixing system is available, slowly pour **BIOCOOL 3820** into water while stirring continuously to achieve a correct preparation of the emulsion.

To ensure the best quality of emulsion and maximize the fluid efficiency, consult the **Good Practices Handbook - Metalworking Soluble Fluids**.

Storage Conditions :

The product should be stored between 5°C and 40°C for best performance. The product should be stored away from direct sunlight and in a cool, covered and dry area.

SERVICES AND EQUIPMENT

In addition to its product ranges, MotulTech can provide tools and services for the maintenance and monitoring of your lubricants. Please contact your technical sales representative for more information.

Information disclosed in this technical data sheet is based on MOTUL's experience and know-how in the development and manufacture of lubricants and other chemical products according to the current state of knowledge.

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