

## DATA HELL

## **BIOCOOL 3220**

#### MULTIPURPOSE METALWORKING FLUID

Synthetic solution

#### **DESCRIPTION**

**BIOCOOL 3220** is a water soluble, mineral oil free, synthetic metalworking fluid concentrate recommended for machining operations which require excellent cooling and very good lubricating properties. The products is recommended for grinding and machining operations on ferrous and non-ferrous metals.

**BIOCOOL 3220** is compliant with SAFRAN Pr-6300 specifications for Inconel and Titanium parts machining.

#### **APPLICATIONS**

BIOCOOL 3220 is a general purpose synthetic oil. The product forms a clear and stable solution with good pH stability and low foaming behaviour in very soft water conditions. 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 3220** is recommended for grinding and light duty machining operations on Alloy Steel, Stainless Steel, Cast Iron as well as Aerospace metallurgies of Titanium and Inconel. The product is complaint with SAFRAN Pr 6300 specifications and is free from formaldehyde release agents, Boron and Nitrites.

#### **ADVANTAGES**

- Excellent cooling properties.
- Very good lubricating properties.
- Excellent bio-stability.
- Good separation of Tramp oils
- Excellent sludge decantation.
- Very good protection against corrosion.

#### **TECHNICAL INFORMATION**

TECHNICAL CHARACTERISTICS	UNITS	METHOD	BIOCOOL 3220
Color	-		Yellow
Density	-	ASTM D4052	1.08
рН	-	NFT 60.193	9.6 5%
Break Point Corrosion	%	IP 287	2
Refractometer Factor	-		2.0
Water Hardness range	ppm		0 - 600

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



# ATA SHEET

#### RECOMMENDED CONCENTRATIONS OF USE

■ Grinding : 3-5%

Machining of ferrous metals: 5-8%
Machining of hard metals: 6-12%
Machining of non-ferrous metals: 6-8%

#### **HEALTH AND SAFETY**

- Bactericide free, formaldehyde and formaldehyde releaser free
- Nitrite and DEA free, without chlorinated, sulfur and phosphorous additives
- Operator friendly: Good dermatological behavior and easy to use

The refractometer reading must be multiplied by the refractometric factor to obtain the real concentration.

**BIOCOOL 3220** can be used for machining of aluminium and copper alloys. However, we recommend checking the tendency of the alloy to stain before use.

#### **INSTRUCTIONS**

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

It is recommended pouring **BIOCOOL 3220** into water slowly 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 Pratices 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.



### **DATA**



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#### Important Notice

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Therefore, we recommend consulting an application engineer to discuss application conditions and product performance criteria before use. It is the user's responsibility to test the functional suitability of the product and to use it under appropriate safety conditions. Our products are subject to continuous improvement with the aim of improving performance or bringing them into compliance with any new and possible regulations concerning them. We reserve the right to change our product lines, our products and their manufacturing processes and any provisions of our publications at any time without notice. This technical sheet cancels and replaces all previous editions.

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