



BIOCOOL 3210

MULTIPURPOSE METALWORKING FLUID

DESCRIPTION

BIOCOOL 3210 is a water soluble fully synthetic metalworking fluid concentrate recommended for general purpose grinding and light duty machining applications which require advanced cooling properties. The product is recommended for ferrous metallurgies.

APPLICATIONS

BIOCOOL 3210 is a mineral oil free synthetic product. The product forms a clear solution which is stable for light duty machining and grinding operations. The product has a stable pH and good anti corrosion properties, which exhibit high resistance to microbiological attacks. The uniquely selected additive package supports low foaming properties and good tramp oil separation.

BIOCOOL 3210 is recommended for Cast iron, Alloy Steel and Steel metallurgies. It is not recommended for Aluminium and its alloys as well as yellow metals. The product is free from formaldehyde release agents, Nitrites, Secondary Amines.

ADVANTAGES

- Low foaming product
- Good separation of tramp oils
- Very good particles settling properties
- Excellent bio stability and stability in use
- Cleanliness of working environment

TECHNICAL INFORMATION

TECHNICAL CHARACTERISTICS	UNITS	METHOD	BIOCOOL 3210
Color	-		Yellow
Density	-	ASTM D4052	1.069
pH	-	NFT 60.193	9.2 at 5 %
Break Point Corrosion	%	IP 287	3
Refractometer Factor	-		2.3
Water Hardness range	ppm		0-800

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



RECOMMENDED CONCENTRATIONS OF USE

- Grinding of iron and steel: 4-6 %
- General machining of iron and steel: 5-8 %
- Machining of hard metals and titanium: 7-14 %

HEALTH AND SAFETY

- Formaldehyde releasers free.
- Boric acid, nitrites, MIPA and DEA free, without chlorinated, phosphorous and sulfur additives.
- Operator friendly: good dermatological behavior and easy to use

The refractometer reading must be multiplied by the refractometer factor to arrive at the real concentration.

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 3210** 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.



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