

# BIOCOOL 3520

## SYNTHETIC FLUID FOR GRINDING OPERATIONS

Synthetic solution

### DESCRIPTION

**BIOCOOL 3520** is a mineral oil free, water soluble, synthetic metalworking fluid concentrate dedicated for the grinding of carbides and hard steel metallurgies. The product is recommended for machining and grinding applications where cobalt leaching tends to contaminate the coolant solutions.

### APPLICATIONS

**BIOCOOL 3520** is a general purpose synthetic oil. The product has a unique additive dosage which allows to prevent cobalt leaching with the usage in the grinding and machining of tungsten carbide metallurgy. The solution exhibits excellent micro-biological control, with good anti corrosion properties, leaves the metal fines settled in the tank, providing clean solution in the operating zone.

**Biocool 3520** is recommended for grinding and light duty machining operations on Alloy Steel, Stainless Steel and Cast Iron metallurgies,. It is not recommended for aluminium and yellow metals. The product is free from formaldehyde release agents, Boron and Nitrites.

### ADVANTAGES

- Avoid cobalt leaching.
- Excellent cooling and detergency properties.
- 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 3520
Density	-	ASTM D4052	1.090
pH	-	NFT 60.193	9.4 at 5 %
Break Point Corrosion	%	IP 287	3
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 of iron steel: 3-6 %
- Grinding of tungsten carbide : 3-4 %

## HEALTH AND SAFETY

- Formaldehydes & formaldehydhe releasers free
- 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 3520** 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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