

BIOCOOL 3820

BORON FREE SYNTHETIC FLUID FOR MACHINING OPERATIONS

DESCRIPTION

BIOCOOL 3820 is a water soluble metalworking fluid concentrate particularly suited to answer to applications which require advanced cooling and lubricating properties.

APPLICATIONS

BIOCOOL 3820 is recommended for all grinding and machining operations on ferrous metals, hard metals, copper alloys and aluminum.

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 and stability in use.
- Operator friendly.
- Excellent bio stability in use.

TECHNICAL INFORMATION

NAME	UNITS	METHOD	BIOCOOL 3820
Color	-	Visual	Yellow
Aspect	-		Liquid
Density at 20°C (68°F)	-	ISO 12.185	1.055
Refractometer Factor	-		2.4
Water Hardness range recommended	ppm		0-800
Break Point Corrosion	%	IP 287	3
pH	-	NFT 60.193	9.8 at 5 %

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

HEALTH & 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

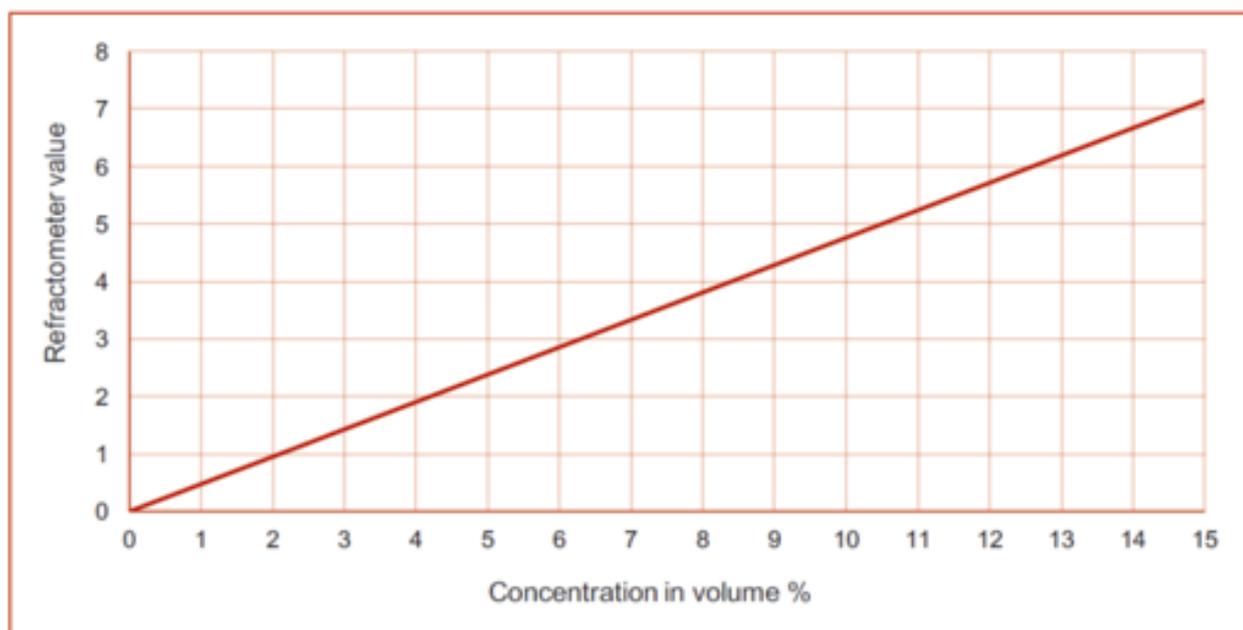
RECOMMENDED CONCENTRATIONS OF USE

- 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 %

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

We recommend to check the tendency of the alloy to stain with the diluted fluid before use on aluminium and copper alloys.

REFRACTOMETER CURVE



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**.



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.