

**SAFKOOL 6420****METALWORKING FLUID FOR CUTTING AND GRINDING**

Boron free semi synthetic coolant

**DESCRIPTION**

**SAFKOOL 6420** is a water soluble metalworking fluid, dedicated for grinding and machining operations that require high cooling and high lubricating properties. The product is recommended for the machining of ferrous and non-ferrous alloys, including standard aluminium alloys and aerospace Titanium alloys. The product can be used for soft water as well as hard water specifications.

**SAFKOOL 6420** is compliant with several OEM specifications for machining :  
- **SAFRAN** Pr-6300 for Titanium.

**APPLICATIONS**

**SAFKOOL 6420** is free from formaldehyde release agents. The product has highly advanced additive package, which provides good anti corrosion properties, stable pH for long sump life. Safkool 6420 can be used for machining of most aluminium and copper alloys.

However, we recommend to check the tendency of the alloy to stain before use.

**ADVANTAGES**

- Excellent non foaming properties
- High pressure compatible (up to 70 bars)
- Excellent bio stability
- Good separation of tramp oils
- Reduction of tools wear
- Good emulsion stability, even in hard waters

**TECHNICAL INFORMATION**

TECHNICAL CHARACTERISTICS	UNITS	METHOD	SAFKOOL 6420
Color	-		Yellow/Orange
Density	-	ASTM D4052	1.024
pH	-	NFT 60.193	9.4 at 5 %
Break Point Corrosion	%	IP 287	2
Refractometer Factor	-		1.7
Water Hardness range	ppm		100-600

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

## RECOMMENDED CONCENTRATIONS OF USE

- General machining of iron and steel: 4-6%
- General machining of aluminium: 6-8%
- Tapping / Threading / Reaming: 8-12%
- Machining of titanium and nickel alloys: 8-15%
- Grinding: 3-6%

## HEALTH AND SAFETY

- Formaldehyde releasers free
- Nitrites, glycol ether and DEA free, without chlorinated or 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 **SAFKOOL 6420** 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 :

To ensure any deterioration of the concentrate, always store the product between 5°C and 40°C.

Keep away from direct sunlight and store in a covered, cool 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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