

### SAFKOOL 6420

Micro-Emulsion for Machining

#### **DESCRIPTION**

**SAFKOOL 6420** is a water emulsifiable metalworking fluid concentrate dedicated for all grinding and machining operations that require high cooling and high lubricating properties.

**SAFKOOL 6420** is recommended for the machining of ferrous and non-ferrous alloys, including aerospace aluminum alloys, nickel and titanium.

Based on a very specific chemistry, **SAFKOOL 6420** is suitable for dilution in both soft and hard water.

#### **APPLICATIONS**

**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**

- SNECMA approval on aluminum and titanium (following document n °455-201-0-00 index B).
- Excellent non foaming properties.
- High pressure compatible (up to 70 bars).
- HSM compatible.
- Excellent lubricating & cooling properties.
- Reduction of tools wear.
- Good separation of tramp oils.
- Good emulsion stability, even in hard waters.
- Excellent bio stability.
- Operator friendly.
- Cleanliness of working environment.





# HEET

#### **TECHNICAL INFORMATION**

| NAME                                  | UNITS | METHOD     | SAFKOOL 6420 |
|---------------------------------------|-------|------------|--------------|
| Color                                 | -     | Visual     | Yellow       |
| Aspect                                | -     |            | Liquid       |
| Density at 20°C (68°F)                | -     | ISO 12.185 | 1.025        |
| Refractometer Factor                  | -     |            | 1.6          |
| Water Hardness range recom-<br>mended | ppm   |            | 50-800       |
| Break Point Corrosion                 | %     | IP 287     | 2            |
| рН                                    | -     | NFT 60.193 | 9.6 at 5 %   |

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

#### **HEALTH & SAFETY**

- Formaldehydes and formaldehydes releasers free
- Nitrites, glycol ether and DEA free, without chlorinated or sulfur additives
- Operator friendly: good dermatological behavior and easy to use

#### RECOMMENDED CONCENTRATIONS OF USE

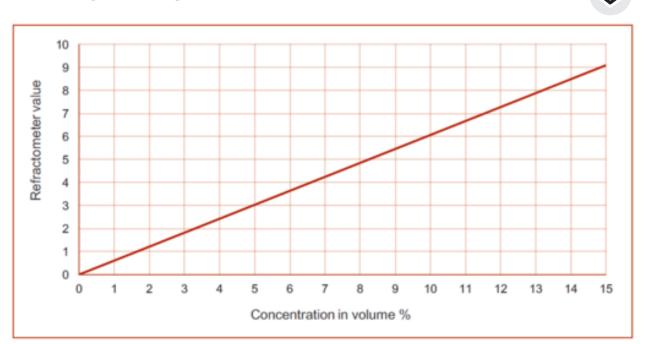
- General machining of iron and steel: 4-6%
- General machining of aluminium: 6-8%
- Tapping / Threading / Reaming: 8-12%
- Machining of titanium and nickel alloys: 8-15%
- Grinding: 3-6%

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



## DATA -

#### 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 **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**.

#### **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.