

# STARCUT M 16

BIO STABLE MICRO-EMULSION FOR ALL MACHINING OPERATIONS

410031-410931/12.15

Rev. 3

## DESCRIPTION & APPLICATIONS

STARCUT M 16 is a microemulsion for all water hardnesses.

This product is specially formulated to address the concerns of health and safety services and does not contain sulfur, chlorine, phenol or silicones.

STARCUT M 16 is suitable for all machining operations where it is necessary to deliver cooling and lubricating properties. STARCUT M 16 is adapted for machining of steel and its alloys and copper alloys.

STARCUT M 16 provides excellent results for:

- automatic turning (including drilling, tapping,...)
- sawing, grinding
- CNC machining operations, blank forging at high speed.

## ADVANTAGES

- Excellent refrigerant and lubricating properties
- Excellent anti-corrosion properties
- Perfect compatibility with machine parts (seals, paintings ...)
- Excellent resistance to bacterial degradation.
- Harmless for users

## ENVIRONMENT, HEALTH & SAFETY

Please consult also the Safety Data Sheet about how to manipulate and to stock the product as well as to learn about the first aid measurements in case of accident.

Elimination after use must be made in conformity with the local rules in force about used soluble oils disposal. When needed, Safety Data Sheet can be obtained upon request.

# STARCUT M 16

## USE

### Storage life:

Maximum 12 months from the date of fabrication.  
Protect against frost and not warmer than 40°C.

### Concentration:

General metal working applications: 5 %  
Severe metal working applications: 7-8 %  
Grinding: 3-4 %

### Preparation of the emulsion:

Always pour the concentrate into the water and mix gently (NEVER reverse the mixture). We can propose automatic mixers to produce a consistent emulsion.

### Emulsion management:

Remove the free oil, metal chips or other contaminants from the surface of the emulsion bath. Measure the concentration periodically with a refractometer. Make sure the concentration does never drop under 2 % in order to maintain a proper protection against corrosion and bacteria.

### Remark:

We advise to clean polluted baths with GROTANOL SR 2. GROTANOL SR 2 can be used depending on the contamination of the reservoir between 0.25% and 0.75% aqueous solution. (= 0.25 to 0.75 liter Grotanol SR 2 to be added per 100 liters of emulsion of the bath).  
Best cleaning result is obtained after 6 to 24 hours.

## PROPERTIES

CHARACTERISTICS	UNITS	METHODS	TYPICAL DATA	
Type	-	-	M 16	M 16 S
Correction factor refractometer	coefficient	-	1,7	1,9
Product number	-	-	410031	410931

CHARACTERISTICS	UNITS	METHODS	TYPICAL DATA
Specific gravity at 15°C	kg/m <sup>3</sup>	NFT 60101	983
Viscosity of the concentrate at 40°C	mm <sup>2</sup> /s (cSt)	NFT 60100	67
pH at 5 % in water	-	NF T 90-008	9
Color	-	-	rose

*The average values are given for information only.*