

SAFECUT M145 NT

BORON AND CHLORINE FREE MICRO EMULSION
METALWORKING FLUID

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Rev. 4

DESCRIPTION & APPLICATIONS

SAFECUT M 145 NT is an emulsifiable fluid especially developed for hard water (> 12°Dh) to form a translucent micro-emulsion. The emulsion has excellent refrigerant and lubricating properties and is suitable for all machining operations, and is therefore useful as an all-round option within the water-soluble metalworking range.

SAFECUT M 145 NT has excellent properties in easy chip removal on ferrous and nonferrous metals. Both cooling and lubricating capacities provide an excellent cutting power.

SAFECUT M 145 NT has exceptional properties for lubricating and cooling the most common machining operations on steel, aluminum and yellow metals and even some operations on stainless steel. The SAFECUT M 145 NT formula also prevents foaming.

SAFECUT M145 NT has been engineered to achieve its performance without boron, secondary amines, chlorine, formaldehyde or nitrites. This combination of properties allows you to use an ecologically responsible and user-friendly / safe device without sacrificing workpiece quality or tool life.

ADVANTAGES

- SAFECUT M 145 NT is formulated by taking account of the most severe recommendations as far as hygiene and safety are concerned. Free from diethanolamines (DEA), it avoids the formation of carcinogenic nitrosamines, by reaction with nitrite present in water.
- SAFECUT M 145 NT is free of chlorine, nitrite and formaldehyde. The formula is also completely free of boron and boron-containing components.
- Contains a high concentration of specific additives to improve tool life.
- High biostability, achieved without formaldehyde, allowing the product to remain in use for a long time.
- Pleasant smell for the users.
- No smoke formation.

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.

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USE

Storage life:

Maximum 6 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: 7-10 %
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 ECOCLEAN. ECOCLEAN can be used depending on the contamination of the reservoir between 1% and 4% aqueous solution. (= 1 to 4 liter ECOCLEAN to be added per 100 liters of emulsion of the bath).
Best cleaning result is obtained after 3 to 5 days.

PROPERTIES

CHARACTERISTICS	UNITS	METHODS	TYPICAL DATA
Specific gravity at 15°C	kg/m ³	NFT 60101	963
Viscosity of the concentrate at 40°C	mm ² /s (cSt)	NFT 60100	58
pH at 5 % in water	-	NF T 90-008	9,8
Corrosion inhibition	%	DIN 51360-II	3
Correction factor refractometer	coefficient	-	1,25
Color	-	-	Pink

The average values are given for information only.