

Cast iron	
Steel + alloys	V
Aluminium	V
Yellow metal	
Stainless steel	
Titanium	

SAFECUT AERO 405

SOLUBLE OIL FOR METALWORKING IN AERONAUTICS

410054/02.24 Rev. 2

DESCRIPTION & APPLICATIONS

SAFECUT AERO 405 is a special micro-emulsion, free from formaldehyde and boron, developed for difficult machining operations on all metals where surface finish is important.

SAFECUT AERO 405 is very suitable for milling, turning, sawing and drilling.

SAFECUT AERO 405 has been specially developed to meet the specifications of EADS ASN 42.302. It is therefore perfect for operations of aluminum types such as 7175, 7075, 2024, . . . With its property of good resistance to higher pressures.

SAFECUT AERO 405 is also very suitable for machining on steel and alloys.

ADVANTAGES

- Good cooling capacity
- Protects metal pieces against corrosion
- Can be used for very different machining applications of metal
- Does not contain formaldehyde, or formaldehyde releasing agent
- Boron free

USE

Concentration:

When first time using the product or when renewing the bath, a slightly higher concentration and pH value is recommended. This is because the product will "set" during the first few days.

During use, the following concentration should always be achieved:

(refractometer X correction factor)= 5 - 9%,

where the pH value in the bath must be ≥ 9 to guarantee biostability.

SAFECUT AERO 405

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 5 % in order to maintain a proper protection against corrosion and bacteria.

For polluted baths we recommend adding GROTANOL SR 2 to disinfect the machine. It is also advisable to apply this treatment preventively, a few days before a longer standstill.

PROPERTIES

The average values are given for information only.

CHARACTERISTICS	UNITS	METHODS	TYPICAL DATA
Specific gravity @ 20°C	kg/m ³	NFT 60101	989
Aspect of the concentrate	-	-	Amber
pH à 5 % in water	-	NF T 90-008	8,5
Correction factor refractometer	coefficient	-	1,9

ENVIRONMENT, HEALTH & SAFETY

Storage of the concentrate:

The guaranteed shelf life is 12 months from the date of production.

Store absolutely frost-free and not warmer than 40°C.

For guidelines regarding handling, storage, first aid in the event of accidents, etc., please refer to the safety sheet that you can obtain on request. Disposal after use must be carried out in accordance with the regulations regarding disposal of used metalworking fluids.

We are at your disposal for any necessary assistance.