

Productdescription



Uno-X Smøreolie UnoCut Aqua 6400

Metalworking Fluid, Boron Based, Medium Oil Semi-Synthetic

Description

UnoCut Aqua 6400 is a modern, boron based, medium oil semi-synthetic metalworking fluid incorporating next generation low foaming emulsification technology. UnoCut Aqua 6400 is formaldehyde release biocide free and is free from secondary amines and is able to meet the high performance demands of the modern machine shop, whilst meeting the latest EHS standards.

UnoCut Aqua 6400 is especially suited to high performance multi-metal machining applications. UnoCut Aqua 6400 is based on low foam polymeric emulsifier technology which provides exceptional emulsion cleanliness and stability, hard-water stability upto approx. 42°dH and extreme low foaming properties at high pressures (upto 70bar).

Typical Applications

- General and heavy duty ferrous machining including stainless and alloyed steels.
- General machining of principle and high silicon aluminium alloys.
- Yellow metal alloys.
- Composite and polymeric materials.
- Titanium alloys (at high concentrations).
- High pressure coolant systems.

Key Performance Benefits

- Extremely low foaming, even at high pressures and during long cycles. Based on Italmatch's next generation low foam emulsification technology.
- Superb emulsion stability and cleanliness even in hard water.
- A Premium secondary amine free and formaldehyde-release biocide free product delivering high machining performance and robust corrosion protection (ferrous and yellow metals).
- Excellent pH buffering to maintain fluid life and reduce maintenance time.
- Proven high operator acceptability with no odour.

Typical Characteristics

Concentrate:

Appearance : Yellow/amber slight hazy liquid
SG at 15.5°C : 1,0
Total Alkalinity, % KOH : 9,4

Emulsion:

pH @ 5% : 9,4
Refractometer factor : 1,2
IP 287 : 2,0% 2,5% 3,0%



Emulsion Quality



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Emulsion depending on application (guideline)

- General machining 5-6%
- Hard machining 7-9%
- Deep hole drilling 6-8%
- Thread cutting 6-8%
- Grinding, creep feed grinding 3%-10%

Management and Handling of Metalworking Fluids

Product Mixing

- Uno-X Smøreolie A/S advise the use of automated mixing systems. If mixing manually, always add the concentrate to the water with maximum agitation. If water is added to the concentrate the emulsions may prove unstable. Avoid mixing with very cold concentrate or water. Check emulsion strength using a calibrated refractometer.

Product Management

- The working concentration should be carefully controlled and monitored on a daily basis, as higher or lower concentrations have health and safety implications. Machines should be cleaned out regularly. Fluid and particulate contaminants should be kept to a minimum. This is important, especially in terms of bacterial control and is in line with the latest advice from government and professional sources. Detailed reference sources are quoted in the SDS.

Storage

- Store inside warehouse, ideally between 10°C and 30°C.
- Shelf life of 12 months from date of manufacture.
- Store out of direct sunlight.
- Avoid water collecting on barrel top.