Mobilcut 231

Mobil Industrial , 中国

Aqueous Metal Working Fluid

Product Description

Mobilcut™ is the trademark for Mobil Industrial lubricants line of high performance water miscible metal removal fluids. The products are designed to work in a variety of hard and soft water qualities and offer low foam potential, stable emulsion and long-term corrosion protection for machine and components. Low maintenance and inherently stable, Mobilcut products are designed for the modern machine shop where long service life and excellent machining performance are important factors for increased productivity. These products are supplied in concentrated form and require mixing with water at the point of use. Mobilcut 231 is free of formaldehyde release agents (FAD).

Mobilcut 231 is a high quality semi synthetic water miscible metalworking fluid with special EP additive designed to form a stable emulsion which is suitable for hard and soft water in the range from 50 ppm to 500 ppm. Having a relatively low oil content, the product has good detergent, coolant and cutting properties, making it suitable for a light to moderate duty cutting applications. Mobilcut 231's formulation makes it particularly recommended for the machining of different materials like cast iron, plain carbon steel as well as high alloy steel while helping to maintain machine cleanliness.

Features and Benefits

Mobilcut 231 is designed to help increase the productivity of modern machine shops by providing high performance features

Features	Advantages and Potential Benefits
Form stable emulsions and solutions	Ease of use and maintenance
Long term inherent stability	Increases batch life and reduces unpleasant odors
Low foaming potential	Improved performance even in high pressure systems
Resists formation of sticky residues	Improves machine cleanliness
High degree of corrosion protection	Reduces machine maintenance and rework of materials
Good separability from fines	Improves filterability and surface finish
Wide Range of applicability	Potential to consolidate products and reduce inventories

Applications

Mobilcut 231: Machining of ferrous metals in centralized or individual machines. Lower oil content for extra wettability and corrosion protection. Well suited for cast iron machining and cutting. Fluid type is micro emulsion. Mineral oil content is approximately 40%. Optimal water hardness range is from 50 ppm to 500 ppm.

The recommended concentration depends on the application and the materials to be machined:

General machining: from 5 %-10%

Low alloy steels - milling, turning: 5-7%

Carbon alloy steels, difficult machining: 6-10%

Properties and Specifications

Property	
Anti-corrosion properties (emulsion) (5% in 360 ppm hardness water), -, DIN 51360-2	0/1
pH (emulsion) (5% in 360 ppm hardness water), -, DIN 51369	9.2
Kinematic viscosity 20 C (concentrate), mm2/s, DIN EN ISO 3104	93
Density at 15 C, kg/m3, ISO 3675	986
Appearance (concentrate), -, AA.Lab.101	Yellow Clear Liquid
Emulsion stability (5% in 360 ppm hardness water), -, AA.Lab.102	translucent emulsion, no seperation
Foaming behavior (5% in 360 ppm hardness water), sec/ml, AA.Lab.103	30/0
Refractive index factor (5% in 360 ppm hardness water), %, AA.Lab.105	1.2

Health and safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ http://www.msds.exxonmobil.com/psims/psims.aspx

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