

rhenus FU 51

rhenus FU 51 is a water-miscible EP metal working fluid based on mineral oil, free from amines and boric acid. A product of outstanding machining capability teamed with optimum protection for operator and machine.

Application

rhenus FU 51 is primarily used for any heavy-duty machining operation of steel, cast iron and aluminium materials on individual machines, machining centres and central systems.

Properties

- whitish, finely dispersed emulsions
- universal application
- high stability, low drag out losses
- good sump life of emulsions
- low foaming at different water qualities
- good skin tolerance due to low pH-values (8,0-8,8)

Technical Data

Concentrate		Emulsion	
Viscosity 20 °C (mm ² /s)	Mineral oil content %	pH-value fresh preparation at 5 %	Corrosion protection (DIN 51360/1)
approx. 160	approx. 50	9,2	at 2,5 % R0-S0

Remarks

To prepare operating emulsion slowly add the coolant concentrate to drinking quality water assuring thorough mixing. Mixing can also be done by means of an automatic mixer.

Recommended mixing ratios:

Machining of aluminium and steel: from 5 %

Machining of casting: from 6 %

The concentration of the operating emulsion can be determined by means of a refractometer. The Brix value multiplied by the refractometer value equals the concentration in %. Sometimes reading of scale is more difficult with older emulsions because of the more coarse dispersity.

Refractometer factor 0,9

Rhenus metal working fluids are free of chlororganic substances, nitrite and secondary amines. They contain natural raw materials. Therefore, slight degradations of colour and appearance are possible, however, quality and function of the product are not affected at all.

Subject to modification of the technical data. Please refer to the material safety data sheet for additional information or contact our application engineers.

Edition

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