

# rhenus TU 410 T

**rhenus TU 410 T** is a boron-free, water-miscible EP-coolant based on alternative amines for universal machining operations.

## Application

**rhenus TU 410 T** is universal to use for nearly all machining operations of materials like steels, cast iron, aluminium alloys and non-ferrous metals. It is applicable on single filled machines as well as on central systems. Because of its good flushing properties compared with excellent foaming behaviour it is also suitable in grinding operations.

## Properties

- boron-free
- low foaming in soft and hard water
- effective EP-additivation
- finely dispersed emulsion - low top-up concentrations
- long tool life - good surfaces
- excellent flushing effect – clean machines
- high stability – good sump life
- good corrosion protection
- good skin tolerance
- pleasant smell
- favourable process costs

## Technical Data

Concentrate		Emulsion	
viscosity 20 °C (mm <sup>2</sup> /s)	Content of mineral oil %	pH-value 5 %	corrosion- protection (DIN 51360/2)
approx. 310	approx. 30	9.7	5 % grade 0

## 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 steel, cast iron and aluminium alloys:	from 6 %
Machining of high tensile steel:	from 8 %
Grinding:	from 6 %

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

For the application please observe the valid VDI guidelines 3035, 3397 sheets 1 - 3. Protect against frost, heat and direct sunlight. Recommended storage and transport temperature: 5 - 40 °C.

## Refractometer factor

1.0

Rhenus coolants are free of nitrite. This product contains natural raw materials. Therefore, different shades 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

01/21