

# rhenus TU 560

**rhenus TU 560** is a water-miscible, mineral oil and boron-free EP metalworking fluid, based on synthetic ester and alternative amines.

## Application

**rhenus TU 560** is a high performance EP-coolant, universal to use, suitable for difficult machining operations of aluminium alloys, high tensile steels, titanium alloys and special materials, which are used in the aircraft industry.

## Properties

- finely dispersed emulsion, good flushing effect
- good corrosion protection
- good skin tolerance
- formaldehyde-free
- no chlorine, no nitrite, no mineral oil
- good residual properties
- EP effect (Reichert): at 5 %: 14 mm<sup>2</sup>
- WGK 1

## Technical Data

Concentrate		Emulsion	
viscosity 20 °C (mm <sup>2</sup> /s)	Content of ester oil %	pH-value 5 %	corrosion- protection (DIN 51360/2)
approx. 380	approx. 42	9.5	4 % grade 0

## Remarks

**rhenus TU 560** is tested for the common aircraft alloys.

**rhenus TU 560** does not contain ingredients commonly known as "silicon". **rhenus TU 560** contains polysiloxanes modified with polyethers which demonstrably can be removed with usual cleaning methods and which do not have any influence on the subsequent surface treatment.

**rhenus TU 560** does not contain any halogenated ingredients.

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 ratio:

Machining of aluminium alloys and steels:	7 - 10 %
Machining of Titanium alloys:	8 - 12 %
Machining of special materials:	from 7 %

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

1.2

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

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