

rhenus TY 155 L

Description **rhenus TY 155 L** is a boron-free, water-soluble fully synthetic special coolant for the efficient machining of materials, particularly in the semiconductor industry.

Application **rhenus TY 155 L** is used for almost all machining operations on materials such as stain-sensitive aluminium alloys, steels, titanium alloys, non-ferrous metals and special materials.

rhenus TY 155 L meets the requirements of the semiconductor industry for water-miscible special coolants (HIO-uncritical product).

Benefits **rhenus TY 155 L** is particularly characterised by:

- no staining on stain-sensitive aluminium alloys, such as EN-AW 5083
- excellent lubricating and cutting effects
- excellent rinsing effect
- Very good foaming behavior, even when using deionized water
- boron-free, formaldehyde-free
- contains no silicon, phosphorus, zinc and/or tin-based ingredients
- good skin tolerability
- EP effect (Reichert) 5% (NW 20): 12 mm²

Preparation The operating solution is prepared by slowly pouring it into the provided water while stirring thoroughly at the same time, or with the help of automatic mixers.

When using the product for critical processes in the semiconductor industry, the use of deionized water is recommended in order to rule out the external entry of ions when preparing the solution as far as possible.

The optimal mixing temperature for the concentrate and preparation water is 15-20 °C.

Technical Data

Concentrate		Solution	
Viscosity 20 °C (mm ² /s)	Mineral oil content %	pH-value of fresh 5% preparation(NW0 water)	Corrosion protection (DIN 51360/2)
approx. 55	0	8.1	5% (NW0 water) Grade 0

Refractometer factor 2.0

The concentration of the working solution can be determined using a pocket refractometer. The °Brix value multiplied by the refractometer value equals the concentration in vol-%. Sometimes reading of the scale is more difficult with older solutions.

Mix suggestions

Machining	7 – 12%
Grinding	from 5%

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General information

For the application, please observe the applicable VDI guidelines 3035, 3397 sheet 1 – 3.

Protect from frost, heat and direct sunlight. Recommended storage and transport temperature: 5 - 40 °C

The information in this leaflet gives only general, non-binding orientation values that we have gained from our current knowledge during research and development as well as from applications under specific laboratory conditions. Under no circumstances do they contain an assurance of properties or a guarantee for the suitability of the product for the individual case.

The performance and properties of the product as well as the results achieved with it depend on the individual application and a large number of factors such as the working conditions and the system configuration and can vary considerably.

The information does not release the user from the responsibility for always checking the product for integrity, checking the suitability of the product for the individual case and testing it in an experiment, and using the product in accordance with the recommendations and specifications. If you have any questions about the use and suitability of the product, please contact our application engineering department.

Our products are subject to constant optimization processes. We therefore reserve the right to make changes to the composition and manufacture - provided that there are no customer-specific agreements to the contrary.

Edition

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