Technical Data



Tubol™ 333

Water soluble rolling lubricant for copper and copper alloys



Description

Tubol 333 is a water-soluble rolling lubricant designed for rolling copper and copper alloy, strip, sheet and tubes. It has been formulated from high quality additives to offer robust lubrication package generating superior performance over a wide range of rolling conditions.

Features and benefits

- Non-staining and inhibited to protect the metal surfaces from corrosion
- Low foam tendency and good anti-bacterial properties
- High detergency ensuring a high degree of cleanliness to rolls and mill housings
- Mixes readily with water to produce stable emulsions
- Stable over a wide temperature range ensuring consistency and economy in use
- Excellent operator acceptability

Dilution range

Cold rolling copper rod, strip or section 3 - 10%Hot rolling copper rod 1 - 5%

Pack sizes

Tubol 333 is available in 205 litre drums

Global specialists in high-performance lubricants

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Metalube Limited, 4 Huntsman Drive, Northbank Industrial Park, Irlam, Manchester M44 5EG, UK Tel: +44 (0)161 775 7771 Fax: +44 (0)161 775 7511 post@metalube.co.uk www.metalube.co.uk

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Recommended instructions for use

Best used in low hardness and low salt content water but can be used in waters with up to 200 ppm CaCO3 hardness. Ideally, use water with an initial hardness of 60-100 ppm CaCO3 to prepare a fresh emulsion, with de-ionised water being used for subsequent replacement of evaporation losses, spillage etc.

To prepare an emulsion always add Tubol 333 concentrate to water with adequate agitation – never add water to the concentrate.

Technical data (typical values)

Property	Test method	Result
Appearance	MSTM 1	Clear amber fluid
pH Value (4.0% solution)	MSTM 18	9.8
Density at 20°C	MSTM 23	0.91 g.cm ⁻³

Storage

Store Tubol 333 Fluid out of direct sunlight and protect from frost. Storage temperature should be controlled to between 5°C and 35°C.

Concentration monitoring

Emulsion concentration is generally measured using a refractometer measuring on the Brix scale.

To obtain the actual concentration multiply the refractometer reading by the correction factor 1.02

e.g. Refractometer reading = 6.0

Correction factor X 1.00

Actual dilution = 6.0%

The product information in this publication is based on knowledge and experience at the time of printing. There are many factors outside our control or knowledge which affect the use and performance of our products, for which reason it is given without responsibility.

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