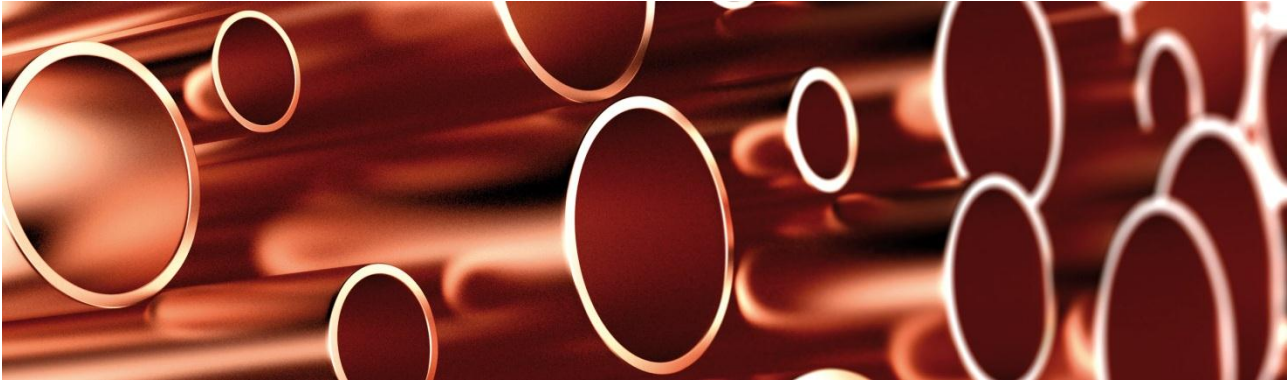




Tubol™ 193

Non-ferrous tube drawing lubricant



Description

Tubol 193 is a high performing lubricant formulated for drawing copper tubes on high speed spinner-blocks. This semi-synthetic lubricant has been developed with highly refined base oils together with the latest additive technology to offer excellent lubricating properties at elevated working temperatures and drawing speeds.

An outstanding reference for the lubricating properties of Tubol 193 is that it was selected for inner lubrication of the longest lengths of copper tube produced in the world on spinner blocks.

Tubol 193 lubrication properties are complemented by good bright annealing, low fume and low chemical reactivity characteristics, which aid the production of top quality copper tubing. It is used in the production of copper tubes for sanitary and ACR applications.

Tubol 193 is applied by both total loss / single shot and by recirculation to the die for O.D. lubrication.

Tubol 193 can also be used for drawing tube, strip and section, on Schumag type equipment and draw-benches.

Customer's individual working methods and technical requirements may require the selection of other products within Metalube's Tubol range of drawing lubricants.

Global specialists in high-performance lubricants

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Company registration number: 2263118; Company registered in England VAT registration number GB108244927000



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Tubol™ 193

Features and benefits

- Optimum lubricating properties to ensure long tool life and enhanced surface finish of the drawn tube
- Excellent bright annealing characteristics in heat treatment processes with inert, dry atmospheres
- Lower carbon residues compared with more conventional polymer oils
- High viscosity index maintains lubricating film even at elevated temperatures

Recommended instructions for use

Tubol 193 should be applied to the work piece in its neat form, by total loss or recirculation methods. This grade is suitable for application to both the inside and outside diameter of non-ferrous tubes.

Pack sizes

Tubol 193 is available in 1000 litre IBC and 200 litre drums

Technical data (typical values)

Property	Test method	Result
Concentrate appearance	MSTM 1	Amber fluid
Kinematic viscosity @ 40°C	MSTM 27	2000 cSt
Density at 20°C	MSTM 23	0.890 g.cm ⁻³

Storage

Store Tubol 193 out of direct sunlight and protect from frost. Storage temperature should be controlled to between 5°C and 35°C.

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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