

Technical Data

Lubricool™ 44N

High performance wire drawing lubricant



Description

Lubricool 44N is a high performance copper wire drawing lubricant based on a highly effective combination of mineral oil and naturally occurring triglycerides. The inherent properties of these oils results in an emulsion with excellent lubricity combined with low foam potential. The broad performance level of Lubricool 44N results in a product that is a truly multi-purpose drawing lubricant with outstanding performance on plain copper, aluminium, aluminium alloy and brass wire.

Lubricool 44N performs extremely well on fine and multi-wire machines with small volume lubrication systems, where foaming can sometimes cause persistent problems.

Features and benefits

- High lubrication properties for increased wear protection on dies and capstans
- Reduces wire break frequency
- Very good foam control
- Excellent emulsion stability extends service life
- Performs well with all types of filtration systems

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 total 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. Bulk emulsion operating temperatures of 35 – 40 °C are recommended.

To prepare an emulsion always add Lubricool 44N concentrate to water with adequate agitation – never add water to the concentrate.

For further information consult the Metalube wire drawing lubricants guide.

Refer to the product safety data sheet for guidance on safe handling, storage and disposal.

Storage

Store Lubricool 44N out of direct sunlight and protect from frost. Storage temperature should be controlled to between 5°C and 35°C.

The most up to date shelf-life information for Metalube products can be found on the certificate of analysis issued at the time of manufacture.

Pack sizes

Code	Pack
F104410	205 Ltr barrel
F104420	1000 Ltr IBC

Dilution range

Application	Dilution
Rod breakdown	10 – 16%
Intermediate wire	6 – 8%
Fine/intermediate	4 – 6%
Fine/superfine	2 – 4%

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 1.03

e.g. Refractometer reading = 6.0
 Correction factor X 1.03
 Actual dilution = 6.18%

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Property	Test method	Result
Appearance	MSTM 1	Clear brown oil
Emulsion Appearance (10% de-ionised water)	MSTM 9	Fine semi-transparent emulsion
Emulsion pH (10% de-ionised water)	MSTM 18	9.2
Conductivity at 25°C (10% de-ionised water)	MSTM 34	1400 $\mu\text{S}\cdot\text{cm}^{-3}$
Density at 20°C	MSTM 23	0.95 $\text{g}\cdot\text{cm}^{-3}$

Note: these values are typical only and do not constitute a specification

Limited warranty information

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective and fully satisfactory for the intended end use. We accept no liability for any loss and/or damage arising from a failure to store our products in accordance with the information contained in this technical sheet. Metalube Group's sole warranty is that our products will meet their quality control specifications in effect at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. To the fullest extent permitted by applicable law, Metalube Group specifically disclaims any other express or implied warranty of fitness for a particular purpose or merchantability. Metalube Group disclaims liability for any incidental or consequential damages.

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