



# Lubricool™ 319

## Semi-synthetic copper wire drawing lubricant



### Description

Lubricool 319 is a high performance, semi-synthetic lubricant designed for high speed drawing of intermediate, fine and super fine copper wire. The combination of synthetic additive technologies provides maximum lubrication and wear reduction on dies to deliver outstanding surface finish on drawn wire. The carefully selected emulsifier system and lubricity additives has resulted in a product that is highly resistant to degradation and destabilisation by hard water salts and dissolved copper. This improved stability significantly enhances emulsion life and reduces the risk of wire staining with improved machine cleanliness.

Lubricool 319 is designed for a wide range of applications - from intermediate to super fine wire – on both plain and tinned copper – and is particularly suited to meet the demands of multi-wire machines.

### Features and benefits

- Provides an exceptional smooth, bright and clean finish to the drawn wire
- Excellent lubrication properties reduce wear on dies and cones to increase drawing speeds and reduce wire break frequency
- Highly resistant to degradation and destabilisation by hard water salts and dissolved copper
- Superior anti-corrosion properties to protect machine parts and the wire surface
- Good resistance to bacterial and fungal attack
- High resistance to excessive foaming
- Excellent emulsion stability extends service life and reduces build-up of deposits on dies and cones
- Excellent compatibility with paper band filters
- Ideal for drawing wire for enamelling

Global specialists in high-performance lubricants

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



Cert No 2367QM8001



## Lubricool™ 319

### 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 CaCO<sub>3</sub> hardness. Ideally, use water with an initial hardness of 60-100 ppm CaCO<sub>3</sub> to prepare a fresh emulsion, with deionised 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 319 concentrate to water with adequate agitation – **never** add water to the concentrate.

For further information consult the Metalube wire drawing lubricants guide.

### Dilution range

Intermediate wire	Finishing 0.30 – 0.80mm	6 – 8%
Fine/Intermediate	Finishing 0.15 – 0.30mm	4 – 6%
Fine/Superfine	Finishing 0.05 – 0.15mm	2 – 4%
Annealers		0.5 – 1%

### Pack sizes

Lubricool 319 is available in 205 litre drums

### Technical data (typical values)

Property	Test method	Result
Concentrate appearance	MSTM 1	Clear amber oil
Emulsion appearance (5% in de-ionised water)	MSTM 9	Fine semi-translucent emulsion
Emulsion pH (5% in de-ionised water)	MSTM 18	9.4
Density at 20°C	MSTM 23	0.95 g.cm <sup>-3</sup>
Conductivity at 25°C	MSTM 34	913 µS

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### Concentration monitoring

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

To obtain the actual dilution multiply the refractometer reading by the correction factor 1.06

e.g. Refractometer reading	= 6.0
Correction factor	X 1.06
Actual dilution	= 6.36%

### Storage

Store Lubricool 319 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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