

Technical Data



METALUBE®

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UNIVERSITY OF STRATHCLYDE

Metaform™ W550EP

High performance water extendable forming lubricant



Description

Metaform W550EP is a high performance, chlorine-free water extendable lubricant designed for a wide range of ferrous cold forming and metalworking operations.

Depending on the severity of the application, Metaform W550EP can be used in its neat form or diluted with water to form a highly stable emulsion with inherent low foaming characteristics.

As Metaform W550EP is water-miscible, it is easily removed after processing to leave components with a noticeably cleaner finish. Metaform W550EP offers a wide dilution range and as such provides superb economy.

Features and benefits

- Chlorine-free
- Outstanding anti-wear and EP package
- Suitable for a wide range of applications
- Water extendable, can be used neat or diluted
- Excellent foam control
- Highly stable emulsion to extend sump life
- Performs well with all types of filtration systems
- Offers improved cleanliness on finish components/section
- Suitable for use on ferrous metals

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



Metaform™ W550EP

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 deionised water being used for subsequent replacement of evaporation losses, spillage etc. Bulk emulsion operating temperatures of 35 – 45 °C are recommended.

To prepare an emulsion always add Metaform W550EP concentrate to water with adequate agitation – **never** add water to the concentrate.

For further information consult your Metalube sales contact.

Dilution range

Stamping	-	10 – 50% or neat
Punching	-	5 – 30%
Rollforming	-	4 – 20%
Pressing	-	30 – 50% or neat
Drawing	-	30 – 100% neat

Pack sizes

Metaform W550EP is available in 1000 litre containers.

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 0.97

e.g. Refractometer reading	=	6.0
Correction factor	X	0.97
Actual dilution	=	5.82%

Storage

Store Metaform W550EP out of direct sunlight and protect from frost. Storage temperature should be controlled to between 5°C and 35°C.

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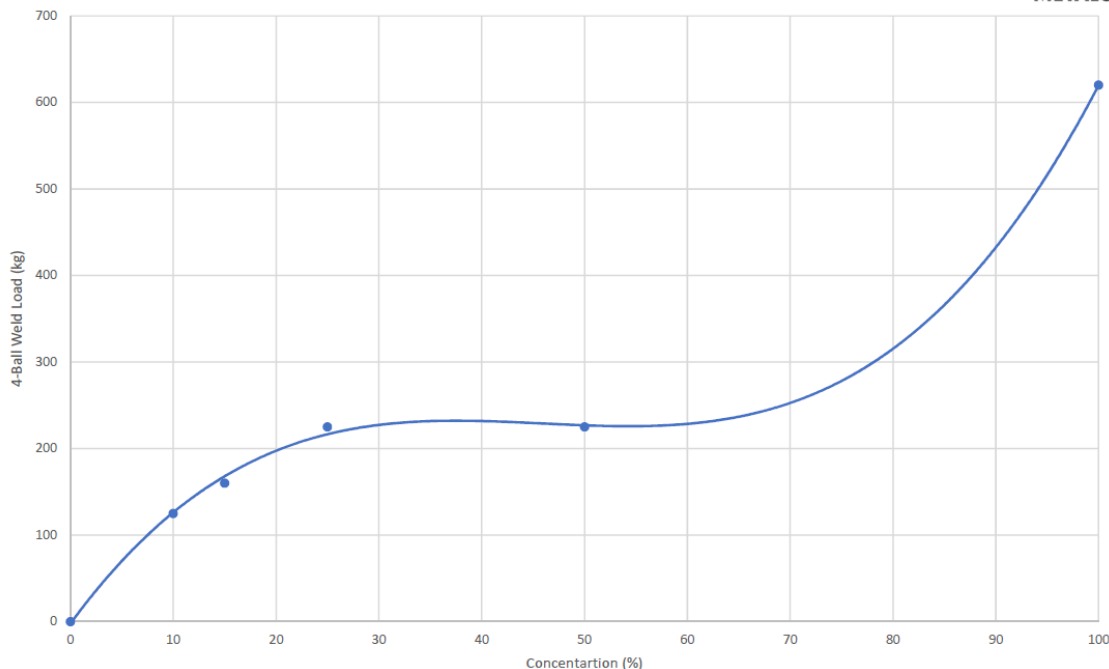


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Technical data (typical values)

Property	Test method	Result
Concentrate appearance	MSTM 1	Clear brown fluid
4-Ball Weld Load (neat)	IP 239	620 kg
Kinematic viscosity @ 40 °C (neat)	MSTM 27	100 cSt
Kinematic viscosity @ 40 °C (50%)	MSTM 27	15 cSt
Emulsion appearance (10% in de-ionised water)	MSTM 9	Milky, off-white
Emulsion pH (10% in de-ionised water)	MSTM 18	8.3
Density at 20°C	MSTM 23	0.954 g.cm ⁻³

Metaform W550EP - Lubrication vs Dilution



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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