

## MSA - LPC 412 B

Low Viscous Mineral Oil Based Metal Working Lubricant

### Product Information

**MSA - LPC 412 B** is a low-viscous, high-performance neat metal working oil for the machining of steel. It is especially designed for gun drilling operations and can be successfully used in BTA, single-lip or ejector deep drilling techniques.

This product shows excellent results if gun drilling operations are combined with turning and milling in one machine or group of machines.

**MSA - LPC 412 B** is characterized by good rinsing properties, fast heat transfer and excellent chip transportation.

**MSA - LPC 412 B** contains severely hydrotreated base oils with low aromatic content, natural and synthetic fatty components, partially sulphurized esters and phosphorous additives. It contains no chlorine or zinc. The balanced additive combination provides lubrication and reduces wear. The results are extended tool life and superior surface quality.

Work piece produced with **MSA - LPC 412 B** can be easily degreased with conventional alkaline industrial cleaners.

### Technical Data

Appearance	yellow low viscous liquid
Specific gravity 15°C	875 kg/m <sup>3</sup>
Viscosity 40°C	12 mm <sup>2</sup> /s
Flash point (COC)	150°C

### Storage

During storage **MSA - LPC 412 B** should not be exposed to temperatures below 0°C or above 40°C. Large temperature fluctuation has also to be avoided. It should be brought to room temperature prior to usage.

### Health and Safety

Please refer to Material Safety Data Sheet for complete information.

### Disclaimer

All statements, technical information and recommendations contained in this Product Information, tests and data unitech believes to be reliable, but the accuracy or completeness is not guaranteed.

unitech warrants unitech products will be free from defects when shipped to the customer. unitech's obligation under this warranty shall be limited to replacement of product that proves to be defective. To obtain replacement the customer must notify unitech of the claimed defect within six month after shipment of product to the customer. unitech shall have no liability for any injury, loss or damage arising out of use of or inability to use the products.

**Before using, user shall determine the suitability of the product for its intended use, and user assumes all risk and liability whatsoever in connection therewith.**

No representation or recommendation not contained in this product information shall have any force or effect unless it is a written document confirmed by unitech.

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