

Mobil Vacmul XLM Series

Oil Based Cutting Fluids

Product Description

Vacmul XLM Series products are high performance oil based grinding fluids designed to meet the needs of a wide range of finishing operations and metallurgies as well as chlorine-free environmental standards. These products are based on high quality unconventional base oils giving benefits of low evaporation and low misting. A modern synergistic chlorine free additive system provides superior lubricity performance for longer tool life and excellent surface finish. The product series consists of three products: Mobil Vacmul XLM 5, 10 and 12.

Mobil Vacmul XLM 5 is recommended for honing and superfinishing operations on various types of metals, including steel, copper and aluminium. The low viscosity gives maximum cooling and allows rapid swarf separation with minimum drag out. Mobil Vacmul XLM 5 is also suitable for cutting and grinding of small parts. Mobil Vacmul XLM 10 is suitable for multi purpose grinding operations, particularly on gears, bearings and axles where a consistent excellent surface is required. Due to the incorporation of lubricity additives in the product, Mobil Vacmul XLM 10 and Mobil Vacmul XLM 12 can also be used for machining of ductile materials. These products are compatible with yellow metals. Mobil Vacmul XLM 12 is also suitable for medium duty cutting applications when a low viscosity, low misting fluid is required and is suitable for severe grinding operations such as flute and gear grinding.

Mobil Vacmul XLM product technology specifically designed for multipurpose application allows the requirements of several machining applications and various machining severities and metallurgies to be met with a single fluid. Their multipurpose capability and ease of application make Mobil Vacmul XLM Series products the preferred choice among machine shop operators.

Features and Benefits

The Vacmul brand of grinding fluids has gained a reputation for innovation and outstanding performance over the years. Our product technologists by formulating Vacmul XLM Series have extended this fine tradition with a special chlorine-free additive technology coupled with unconventional base oils that provide low misting and evaporation. This technology yields superb performance in a wide range of applications, while providing the environmental and disposal benefit of being chlorine-free.

Features	Advantages and Potential Benefits
Transparent and light coloured products	Allows operators easy visibility of tool and work piece
Low evaporation and misting	Improves workshop environment and reduce oil consumption and cost
Broad multipurpose capability	Suitable for use in a very wide range of feedstock and machining operations, with potential for reduced inventory costs.
Excellent lubricity and anti-wear performance	Long tool life, high productivity and reduced operating costs
Highly stable unconventional base stocks	Long change life for low maintenance and product replacement costs

Applications

Mobil Vacmul XLM Series products are oil based grinding fluids designed to meet the needs of a wide range of finishing operations and metallurgies. Specific applications, by grade, include:

- Vacmul XLM 5 is designed for honing and superfinishing operations on various types of metals, including steel, copper and aluminium. Vacmul XLM 5 is also suitable for cutting and grinding of small parts
- Vacmul XLM 10 is suitable for multi purpose grinding operations, particularly on gears, bearings and axles where a consistent excellent surface is required. It is also suitable for light duty cutting applications when a low viscosity, low misting fluid is required. Due to the incorporation of lubricity additives in the product, Vacmul XLM 10 can also be used for machining of ductile materials, such as aluminium and copper alloys. The product is compatible with yellow metals
- Vacmul XLM 12 is suitable for severe grinding operations such as flute and gear grinding. It is also suitable for medium duty cutting applications where a low viscosity, low misting fluid is required

Typical Properties

Mobil Vacmul XLM Series	XLM 5	XLM 10	XLM 12
Viscosity, ASTM D 445			
cSt @ 40°C	4.6	10.9	11.2
cSt @ 100°C	1.6	2.9	3.2
Flash Point, °C, ASTM D 92	144	194	192
Specific Gravity @ 15°C kg/l, ASTM D 1298	0.830	0.835	0.840
Copper Strip Corrosion, ASTM D 130, 3 hrs @ 100°C	1B	1B	1B

Health and Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contract office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

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Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit www.exxonmobil.com. ExxonMobil is comprised of numerous affiliates and subsidiaries, many with names that include Esso, Mobil, or ExxonMobil. Nothing in this document is intended to override or supersede the corporate separateness of local entities. Responsibility for local action and accountability remains with the local ExxonMobil-affiliate entities.

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