

## MTLM (DEF STAN 80-81)

### Molybdenum disulphide assembly lubricant for precision and interference fit parts

#### Product Overview

ROCOL® MTLM (DEF STAN 80-81) is a very high content molybdenum disulphide paste.

It is designed to give a tough, wear resisting, greasy film which provides anti-seize protection, eases assembly and provides complete protection during the critical start up and running in periods.

Ideal for assembling plain bearings, pins, slides and gears etc.

ROCOL MTLM (DEF STAN 80-81) is also suitable for the lubrication of valves and other slow moving parts under high loads.

#### Specifications

- Joint Services Designation – ZX 38
- Defence Standard - DEF STAN 80-81//2 (S-722)

#### Features and Benefits

- Exceptional temperature range -50°C to +450°C.
- Reduces the forces required for assembly of close fitting components.
- Prevents galling, pick up and seizure on assembly and during initial running in period before the service lubricant has circulated.
- Guards against wear and fretting corrosion.
- Resistant to high loads (up to 7,000 kg/cm<sup>2</sup>).
- Excellent wear resistance due to a high molybdenum disulphide content.

#### Directions for Storage and Use

- Ensure surfaces to be treated with ROCOL MTLM (DEF STAN 80-81) are clean, dry and free from oil, grease or dirt contamination.
- Apply a thin even coating by rubbing onto the surface with a lint free cloth.
- When using ROCOL MTLM (DEF STAN 80-81) components can be assembled immediately – no curing time necessary.
- The storage temperature of ROCOL MTLM (DEF STAN 80-81) should be controlled between +1°C and +40°C.
- Shelf life is 3 years from date of manufacture.

#### Typical Applications

- Assembly lubricant where close fitting or interference fits are experienced.
- Initial protection of plain bearings, slides gears etc until the service lubricant has become fully operational.
- Automotive assembly where instructions call for an assembly aid with a minimum of 50% molybdenum disulphide.

#### Pack Sizes

Pack Size	Part Code
100g	16010
500g	16013

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Property	Test Method	Result
Appearance	Visual	Stiff blue-black paste
Base Type	N/A	Severely refined mineral oil
Thickener	N/A	Organically modified clay
Solids	N/A	Molybdenum disulphide
Worked Penetration	N/A	240 - 300
Drop Point	IP 132	Non-melting
Solids content	N/A	50%
Temperature Range	N/A	-50°C to +450°C
4 Ball Weld Load	IP 239 (ASTM D2596)	400kg
4 Ball Mean Hertz Load	IP 239	78kg
Approximate Coverage	0.1mm film thickness	10m <sup>2</sup> /kg

Values quoted above are typical and do not constitute a specification.

### Safety Data Sheets

Safety data sheets are available for download from our website [www.rocol.com](http://www.rocol.com) or may be obtained from your usual ROCOL contact.

The information in this publication is based on our experience and reports from customers. 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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T +44 (0) 113 232 2600  
 F +44 (0) 113 232 2740  
 E [customer-service@rocol.com](mailto:customer-service@rocol.com)  
[www.rocol.com](http://www.rocol.com)

ROCOL House, Swillington, Leeds LS26 8BS

Registered Company No. 559693 VAT No. 742 0531 67  
 Registered Office: Admiral House, St Leonard's Road, Windsor, Berkshire SL4 3BL

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