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Liquid-O-Ring PM600

Liquid-O-Ring PM600 Multi-Purpose Grease Instruction Manual

Model: PM600

INTRODUCTION

The Liquid-O-Ring PM600 is a heavy-duty, multi-purpose lubricant designed for a wide range of industrial and automotive applications. Manufactured by Oil Center Research, this grease provides exceptional performance for bearings and open gears, offering high shock absorption, water resistance, and protection against corrosion. This manual provides essential information for the proper application, use, and maintenance of PM600 grease.

PRODUCT DESCRIPTION

PM600 is a specialized lubricant formulated to withstand extreme conditions. Its unique composition ensures a high melting point of over +500°F (+260°C) and excellent shock-absorbing capabilities. The grease forms a durable lubricating film that effectively prevents metal-to-metal contact, thereby lowering operating temperatures and extending component lifespan. It is also water-resistant and provides robust protection against rust and corrosion.



Image: Liquid-O-Ring PM600 Multi-Purpose Grease in its 14oz cartridge packaging.

Liquid-O-Ring[®] PM600



WATER-RESISTANT and NON-MELTING

Image: View of the red PM600 grease inside an open cartridge.

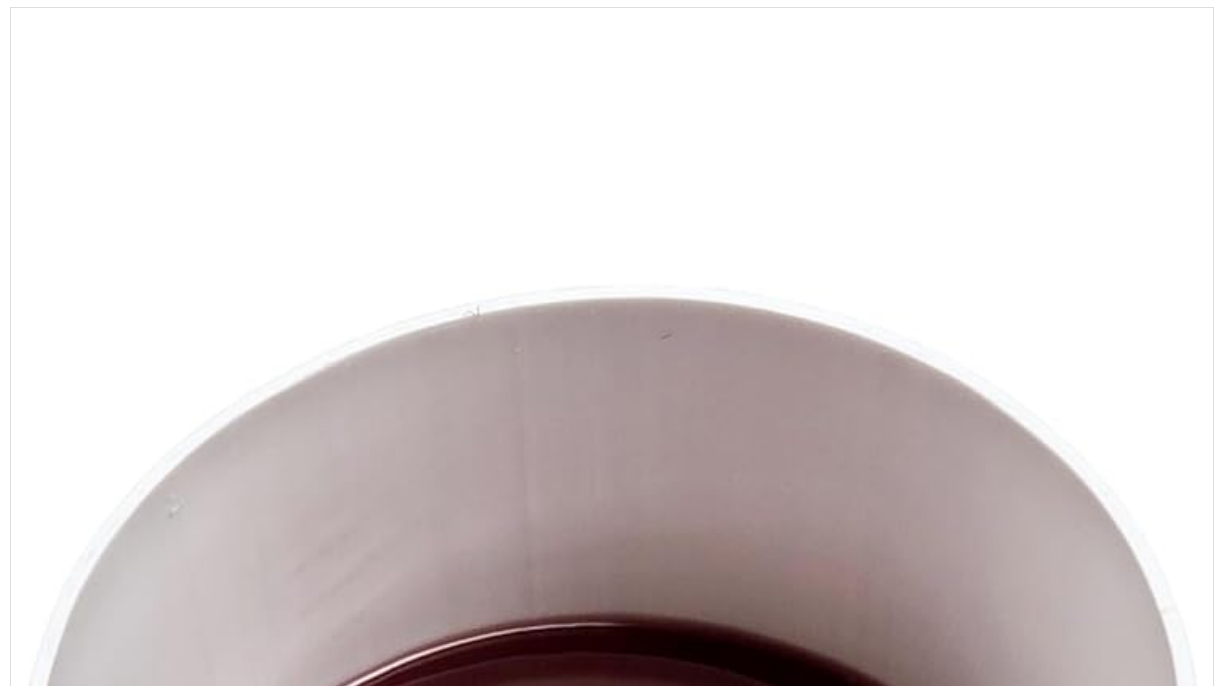




Image: Comparison of the new and old packaging designs for PM600 grease.

Key Features:

- **Multi-Purpose:** Suitable for a wide range of bearings and open gears.
- **High Shock Absorption:** Designed to handle heavy loads and impacts.
- **High Melting Point:** Effective up to +500°F (+260°C).
- **Water-Resistant:** Maintains integrity in wet environments.

- **Corrosion Protection:** Shields metal surfaces from rust and corrosion.
 - **Prevents Metal-to-Metal Contact:** Reduces friction and wear.
 - **Long Service Intervals:** Exceptional adhesive and cohesive properties ensure extended lubrication periods.
-

APPLICATION INSTRUCTIONS

Proper application of PM600 grease is crucial for optimal performance and longevity of your equipment.

Preparation:

- **Clean Surfaces:** Before applying PM600, thoroughly remove all existing old grease and contaminants from the components to be lubricated. This prevents compatibility issues and ensures the full effectiveness of PM600.
- **Do Not Mix:** Avoid mixing PM600 with other types of grease, as this can compromise its performance characteristics.

Application Method:

Apply PM600 directly to the surfaces requiring lubrication. This can be done manually, with a grease gun, or through automated lubrication systems, depending on the equipment and accessibility. Ensure an even coating across all contact points.

Common Applications:

- Wheel bearings
- Chassis components
- Ball joints
- Water pumps
- Fifth wheels
- Universal joints
- Slides
- Pillow block bearings
- Guide rails
- Cams
- Winches
- Bike shocks and dampers
- Any other equipment requiring an extreme pressure lubricant.

Liquid-O-Ring® PM600



**HEAVY-DUTY,
MULTI-PURPOSE
lubricant
manufactured
specifically for
bearings and
open gears**

Image: PM600 is a heavy-duty, multi-purpose lubricant for bearings and open gears.

OPERATING CHARACTERISTICS

PM600 grease is engineered for superior performance under demanding conditions.

- **Temperature Range:** Effective across a broad temperature spectrum, with a high melting point exceeding +500°F (+260°C), making it suitable for high-temperature applications.
- **Shock Absorption:** Possesses very high shock-absorbing abilities, protecting components from impact and heavy loads.
- **Water Resistance:** Its water-resistant properties ensure lubrication integrity even in the presence of moisture, preventing wash-out and maintaining protective barriers.
- **Corrosion Protection:** Actively protects against corrosion and rust, extending the life of metal parts.
- **Reduced Friction:** Forms a robust lubricating film that minimizes metal-to-metal contact, reducing friction and wear, and contributing to lower operating temperatures.

- **Extended Service Life:** The exceptional adhesive and cohesive properties of PM600 lead to longer service intervals, reducing the frequency of re-lubrication.

Liquid-O-Ring[®] **PM600**

TACKY and has
very high
SHOCK-ABSORBING
ABILITIES

PM600 MILITARY GREASE
Liquid-O-Ring[®] HEAVY-DUTY, MULTIPURPOSE GREASE
 • Tacky & has very high shock-absorbing abilities
 • High melting point of +500°F (+260°C)
 • Manufactured with exceptional adhesive and cohesive properties, allowing for long service intervals.
 • Formed in water-washing film that

APPLICATION: Remove all old grease before applying PM600. Do not mix PM600 with old grease.
STORAGE: Keep container tightly closed in a dry and well-ventilated area. Avoid breathing fumes. Get medical attention if you feel unwell.
REMARKS: PM600 is generally used within the temperature range to which it is intended to be applied. It is not intended for use in applications where extreme pressure lubrication is required. PM600 is not intended for use in applications where extreme pressure lubrication is required. PM600 is not intended for use in applications where extreme pressure lubrication is required. PM600 is not intended for use in applications where extreme pressure lubrication is required.

HIGH TEMPERATURE | NON-MELTING | WATER RESISTANT | MIL-G-2188

BY: 03/17/27

Image: PM600 is tacky and offers very high shock-absorbing abilities.

Liquid-O-Ring[®] PM600



PREVENTS
metal-to-metal
contact and
LOWERS
operating
temperatures

Image: PM600 prevents metal-to-metal contact and lowers operating temperatures.

Liquid-O-Ring® PM600

New Packaging

Old Packaging



Image: PM600 is water-resistant and non-melting.

MAINTENANCE AND STORAGE

Storage:

To maintain the quality and effectiveness of PM600 grease, store the container tightly closed in a dry and well-ventilated area. Avoid extreme temperatures and direct sunlight.

Disposal:

Dispose of contents and container in accordance with all applicable federal, state, and local regulations. Consult local authorities for proper disposal methods for industrial lubricants.

TROUBLESHOOTING AND SAFETY INFORMATION

Common Issues:

- **Reduced Performance:** If the grease is not performing as expected, ensure that all old grease was completely removed before application and that PM600 was not mixed with other lubricants.
- **Contamination:** Keep the container sealed when not in use to prevent contamination from dirt, dust, or moisture, which can degrade performance.

Safety Precautions:

- **Ventilation:** Use in a well-ventilated area. Avoid breathing fumes or vapors.
 - **Skin Contact:** In case of skin contact, wash thoroughly with soap and plenty of water.
 - **Eye Contact:** In case of eye contact, flush eyes with water for several minutes. If irritation persists, seek medical attention.
 - **Ingestion:** Do not ingest. If swallowed, do not induce vomiting. Rinse mouth with water and seek immediate medical attention. Never give anything by mouth to an unconscious person.
 - **Fire:** In case of fire, use extinguishing measures appropriate to the surrounding environment.
 - **General:** Always refer to the Safety Data Sheet (SDS) for complete safety information before handling this product.
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PRODUCT SPECIFICATIONS

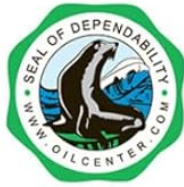
The following table outlines the key physical and performance characteristics of Liquid-O-Ring PM600 Multi-Purpose Grease.

Typical Observations for PM600 Military Grease

| Characteristic | PM600N00 (Color: Red, Tacky) | PM600N0 (Color: Red, Tacky) | PM600N1 (Color: Red, Tacky) | PM600N2 (Color: Red, Tacky) | PM600N3 (Color: Red, Tacky) |
|--|------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Penetration, ASTM-D-217 @ 77°F (25°C) | 445-475 | 400-430 | 355-385 | 310-340 | 265-295 |
| Density, lb/gal @ 77°F (25°C) | 7.40 | 7.42 | 7.44 | 7.46 | 7.47 |
| Specific Gravity @ 77°F (25°C) | 0.888 | 0.891 | 0.893 | 0.895 | 0.899 |
| Flash Point, ASTM D-92 | >400°F (>204°C) | >400°F (>204°C) | >400°F (>204°C) | >400°F (>204°C) | >400°F (>204°C) |
| Dropping Point, ASTM D-2265 | >500°F (>260°C) | >500°F (>260°C) | >500°F (>260°C) | >500°F (>260°C) | >500°F (>260°C) |
| Water Washout, ASTM-D-1264 @150°F (37°C) | 0.0% | 5.8% | 0.0% | 5.1% | 4.8% |
| Freezing Point | -17°F (-27°C) | -13°F (-25°C) | -4°F (-20°C) | -4°F (-20°C) | 0°F (-17°C) |
| 4-Ball EP Weld Load, kgf ASTM D-2596 | 200 Pass 200 Weld | 200 Pass 200 Weld | 200 Pass 200 Weld | 200 Pass 200 Weld | 200 Pass 200 Weld |
| Evaporation Loss, ASTM D-972 & D-2595 (60hr) | 1.30 | 1.30 | 1.28 | 1.15 | 1.00 |
| Shelf Life (unopened container) | Two years | Two years | Two years | Two years | Two years |

Additional Product Details:

- **Package Dimensions:** 10.28 x 3.43 x 2.24 inches
- **Item Weight:** 14 ounces
- **Liquid Volume:** 14 Fluid Ounces
- **Material:** Bentone
- **Package Information:** Cartridge



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PM600 MILITARY GREASE

- GEAR OILS
- MOTOR OILS
- HYDRAULIC OILS
- PIPE COATINGS
- THREAD SEALANTS
- BEARING GREASES
- SPECIALTY GREASES
- THREAD COMPOUNDS
- SUCKER ROD COATINGS
- OUTSIDE PRESERVATIVES
- WIRELINE GREASE SEALS
- CLEANERS & DEGREASERS
- PIPE STORAGE COMPOUNDS
- RUST & CORROSION INHIBITORS
- THREAD LOCKING COMPOUNDS
- VALVE LUBRICANTS & SEALANTS
- TOOL JOINT & DRILL COLLAR COMPOUNDS



PRODUCT DESCRIPTION

PM600 is a heavy-duty, all-purpose lubricant manufactured specifically for bearings and open gears. PM600 is tacky and has very high shock-absorbing abilities with a high melting point of +500°F (260°C). PM600 is a grease manufactured with exceptional adhesive and cohesive properties, allowing longer service intervals. PM600 forms a lubricating film that prevents metal-to-metal contact and reduces operating temperatures. It is water-resistant and protects against corrosion as it lubricates.

BENEFITS

- Non-melting
- Film forming
- Excellent cohesive and adhesive properties
- High shock load
- Water resistant

APPLICATION

PM600 is generally within the temperature range to lubricate wheel bearings, chassis, ball-joints, water pumps, fifth wheels, universal joints, slides, pillow block bearings, guide rails, cams, winches, or any other equipment requiring an extreme pressure lubricant. PM600 is used in many industries such as automotive, marine, aircraft, air conditioning, mining, construction, sugarcane mills, oil fields, cement plants, farms, chemical plants, and food plants.

RELATED PRODUCTS

- 627 Premium Valve Lubricant
- PM600M Premium Gear and Bearing with Moly
- PM800 Premium Bearing Lube
- PM800M Premium Bearing Lube with Moly
- PM900 Military Grease



MADE IN THE USA

TYPICAL OBSERVATIONS

| | PM600N000 | PM600N00 | PM600N0 | PM600N1 | PM600N2 | PM600N3 |
|---|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Color | Red | Red | Red | Red | Red | Red |
| Texture | Tacky | Tacky | Tacky | Tacky | Tacky | Tacky |
| Penetration, ASTM D-217 @ 77°F (25°C) | 445-475 | 400-430 | 355-385 | 310-340 | 265-295 | 220-250 |
| Density, lb/gal @ 77°F (25°C) | 7.40 | 7.42 | 7.44 | 7.46 | 7.47 | 7.50 |
| Specific Gravity @ 77°F (25°C) | 0.886 | 0.889 | 0.891 | 0.893 | 0.895 | 0.899 |
| Flash Point, ASTM D-92 | >400°F (>204°C) | >400°F (>204°C) | >400°F (>204°C) | >400°F (>204°C) | >400°F (>204°C) | >400°F (>204°C) |
| Dropping Point, ASTM D-2265 | +500°F (+260°C) | +500°F (+260°C) | +500°F (+260°C) | +500°F (+260°C) | +500°F (+260°C) | +500°F (+260°C) |
| Water Washout, ASTM D-1264 @ 100°F (37°C) | 6.0% | 5.8% | 5.8% | 5.1% | 4.8% | 4.2% |
| Freezing Point | -17°F (-27°C) | -13°F (-25°C) | -4°F (-20°C) | -4°F (-20°C) | 0°F (-17°C) | 3°F (-16°C) |
| 4-Ball EP Weld load, kgF (ASTM D-2596) | 200 Pass 250 weld | 200 Pass 250 weld | 200 Pass 250 weld | 200 Pass 250 weld | 200 Pass 250 weld | 200 Pass 250 weld |
| Evaporation Loss, ASTM D-972 @ 210°F (98°C) | 1.30 | 1.30 | 1.28 | 1.20 | 1.15 | 1.00 |
| Shelf Life (unopened container) | Two years | Two years | Two years | Two years | Two years | Two years |

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WARRANTY Because the conditions of use and the supervision of application are beyond our control, we assume no liability for any product failure or other damage beyond the purchase price of the material furnished by us. No agent, representative, or employee of this Company is authorized to change this provision, which relates to all goods delivered, whether sold, delivered as samples, or otherwise. Each user should independently determine the suitability of this product based on their specific application.

Manufactured by

BALMAR LLC

616 WEST PONT DES MOUTON ROAD | LAFAYETTE, LA 70507

Sales Locations:

LAFAYETTE, LA | HOUSTON, TX | LONGVIEW, TX | MIDLAND, TX | OKLAHOMA CITY, OK

*Registered trade name of Oil Center Research, Inc. 09/26/13

The product information and specifications listed in this publication are constantly being updated to keep up with government regulations and technology changes. Please visit our web site, www.oilcenter.com, or contact your Account Representative for the most current information relating to this product.

Image: Detailed product label with technical specifications and usage guidelines.

WARRANTY INFORMATION

Specific warranty details for Liquid-O-Ring PM600 Multi-Purpose Grease are not provided in this manual. For information regarding product warranty, please contact the manufacturer, Balmar, LLC, or Oil Center Research

directly.

SUPPORT AND CONTACT INFORMATION

For further assistance, technical inquiries, or safety data sheets (SDS), please contact the manufacturer:

Manufacturer: Balmar, LLC (an Oil Center Research company)

Website: Oil Center Research

Address: 616 WEST PONT DES MOUTON ROAD, LAFAYETTE, LA 70507, USA

When contacting support, please refer to the product model PM600.