MOL LUBE
British High Performance Lubricants

TECHNICAL DATA SHEET

# Mol-Weave PG series

*Synthetic high-performance gear oils for weaving machines*

## Description

**Mol-Weave PG series** oils are specifically formulated to maximize the service life of gear weaving machines. With extended change intervals exceeding 20,000 operating hours, they offer substantial reductions in maintenance demands, optimizing operational efficiency and reliability.

Formulated with a polyglycol base, these oils deliver superior frictional performance, effectively minimizing power losses and maximizing efficiency, which translates directly into cost savings. Their high resistance to scuffing and advanced anti-wear properties provide robust, long-term protection for gears and lubricated components, even under extreme peak loads. Additionally, their outstanding viscosity-temperature stability enhances operational reliability, ensuring consistent lubrication performance for critical components, even at elevated machine temperatures.

## Applications

**"Mol-Weave PG series oils** can be applied using immersion, immersion circulation, or injection methods. For automatic lubrication systems, it is crucial to consult the manufacturer's guidelines regarding maximum allowable viscosity to ensure optimal application.

Please note that **Mol-Weave PG series oils** are incompatible with mineral oils and synthetic hydrocarbons. Therefore, before transitioning to these oils, thorough system cleaning is essential to prevent any issues related to incompatibility.

**Mol-Weave PG series oils** are generally suitable for use with ferrous and most non-ferrous metals. However, in applications involving aluminum or aluminum alloys under dynamic loads, there may be increased wear on contact surfaces. Preliminary wear testing is recommended in such cases to ensure compatibility and durability."

Polyglycol-based synthetic lubricants, such as the **Mol-Weave PG series**, can interact with rubber-elastic sealing materials, with potential effects contingent on both temperature and exposure duration. For continuous operating temperatures up to 102°C—the maximum threshold for **Mol-Weave PG series oils**—seals composed of butadiene-acrylonitrile rubber (NBR) are recommended. It’s important to note that elastomer performance may vary across manufacturers.

When applying **Mol-Weave PG series oils**, two-component (reaction) paints are preferred for internal coatings to ensure material resilience. For oil gauge glasses, natural glass or polyamide materials are advised, as other transparent plastics, such as Plexiglas, may be susceptible to stress-induced cracking. Verifying material compatibility with the lubricant, particularly in serial applications, is essential to ensure optimal performance and extended service life.

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## Health, Safety and Environment

- Normal safety precautions (gloves and safety goggles) Should be employed.
- Don't discharge used oil in drains, dispose to an authorized used oil collection point
- Avoid eye and prolonged skin contact.
- Wash thoroughly after handling material.
- For more information, please see the Material Safety Data Sheet (MSDS).

## Storage Conditions

- Should be stored sealed under normal conditions.
- Shelf life in original package and at room temperature is 3 years.

## Packing Available in

- 20 L
- 208 L

## Physical and Chemical Conditions

| Mol-Weave PG series | 50 | 80 | 100 |
|---|---|---|---|
| Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C | 46 :52 mm²/s | 78 :82 mm²/s | Around 100 mm²/s |
| Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C | 10 mm²/s | 16 mm²/s | 20.5 mm²/s |
| Lower service temperature | -33 °C / -25 °F | -33 °C / -25 °F | -33 °C / -25 °F |
| Upper service temperature | 102 °C / 214 °F | 102 °C / 214 °F | 102 °C / 214 °F |
| Colour space | Light Yellow | Light Yellow | Light Yellow |
| Density, DIN 51757, 20 °C | 1.03 g/cm³ | 1.04 g/cm³ | 1.04 g/cm³ |
| Flash point, DIN EN ISO 2592, Cleveland, open-cup apparatus | >= 192 °C | >= 202 °C | >= 202 °C |
| ISO viscosity grade, DIN ISO 3448 | 46 | especial | 100 |
| Viscosity index, DIN ISO 2909 | >= 172 | >= 192 | >= 213 |
| Copper corrosion, DIN EN ISO 2160, 24 h/100°C corrosion degree | 1 - 100 | 1 - 100 | 1 - 100 |
| Pour point, DIN ISO 3016 | <= -40 °C | <= -40 °C | <= -40 °C |
| FZG scuffing test, DIN ISO 14635-1, A/8.3/90, scuffing load stage | >= 12 | >= 12 | >= 12 |