



**Mobisol PM**  
Mobil Industrial , Portugal  
Synthetic Based Cleaner for Lubrication Systems

Product Description

Mobisol PM is a highly detergent and dispersant synthetic fluid which, when added to the oil in hydraulic, paper machine or general circulation systems, will release and hold in suspension gummy oil oxidation products and insoluble materials. Efficient clean up of the system from deposits accumulated with time in resin and pipework can therefore be achieved leading to the recovery of the system original operating efficiency and to improved equipment protection.

Features and Benefits

Mobisol PM offers the following benefits:

Features	Advantages and Potential Benefits
Higher flash point than light viscosity petroleum based solvents	Can be added to systems without shutting down Downtime is limited to the drainage and refilling operations
Free from corrosive materials Limited effect on seals even at high operating temperatures	Needs no special precautions for storage or use
High level of detergency	Cleans fouled systems by promoting the removal of foreign deposits, carbonaceous material and sludge
High level of dispersancy	Holds contamination in suspension to assist removal in filters
	Clean up of circulation systems contributes in improving operating efficiency and prolonging equipment life

Applications

Mobisol PM should be used in accordance with the following instructions or recommendation should be sought from Mobil technical service:

Introduce Mobisol PM into a contaminated system progressively in 1% increments based on the total volume of system, (maximum to be used 4%).  
Circulate dirty lubricant / Mobisol PM mixture for 3-10 working days whilst regularly checking the condition of all filters. Additional filtration equipment may be required when proper operation of the system could be affected by the release of high amounts of deposits. Oil condition monitoring can be of assistance to monitor the level of deposits being picked up in the oil.  
Drain the system whilst hot and flush with a small volume (10% of the system volume or less) of the new product being introduced.  
Replace all filters and cartridges etc. and fill up with the new circulation oil.

Where pump or bearing manufacturers specify a maximum viscosity for a particular operation, the change in viscosity caused by the addition of Mobisol PM should be calculated from blending tables. In some cases it may be necessary to blend Mobisol PM with a lower viscosity oil before adding it to the fluid in use.

Note:  
Do not use Mobisol PM in N C machine tools or servo valve systems without special engineering consideration. In any systems incorporating sensitive servo valves even very small particles of dirt introduced with the solvent/fluid mixture or dislodged by it may interfere with the valve operation. Cleaning hydraulic systems incorporating servo valves must be carried out strictly in accordance with the manufacturers' instructions.

Mobisol PM is recommended for use for the following applications:

- Clean up of oil circulation systems in service: paper machine lubrication systems, hydraulic systems, open heating systems operating below 140°C, general circulation systems lubricating gears and bearings.
- In closed heating systems, maximum operating temperatures of the fluid are dependent on the duration of exposure to higher temperatures (which can vary with the design of the system, flow rates, etc). Please consult your original equipment manufacturer to ensure proper operation. In addition, the following conditions are recommended: 1) Maintain turbulent flow through the heater with Reynolds number greater than 10,000; 2) take steps (as directed by heater OEM) to avoid localised areas of high heat flux, which can lead to locally high skin temperatures in the heater causing thermal degradation of the fluid; 3) nitrogen blanketing to minimise exposure of the fluid to oxygen and formation of oxidised components.
- Clean up by brush or dip of machine parts, gears, bearings

Typical Properties

Mobilsol PM	
Colour, visual	Brown
Viscosity @ 40°C, ASTM D 445	383
Viscosity @ 100°C, ASTM D 445	21
Viscosity Index, ASTM D 2270	56
Flash Point COC, °C, ASTM D 92	208
Total Base Number, mg KOH/g, ASTM 2896	9.8
Density at 15°C, ASTM D 4052	0.885

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 contact 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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ExxonMobil Lubricants and Specialties Europe division of ExxonMobil Petroleum & Chemical b.v.b.a.  
Polderdijkweg  
B-2030 Antwerpen, Belgium  
<http://www.exxonmobil.com>

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](http://www.exxonmobil.com)  
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