



Mobilarma 500 Series

Mobil Industrial , Singapore

Rust Protection Lubricants

Product Description

Mobilarma 500 Series oils are premium performance products primarily intended as run-in or lay-up lubricants, which provide effective rust preventive films on internal surfaces of machinery. They are particularly suitable as run-in lubricants for diesel and gasoline engines. The oils displace water from metal surfaces and form strong water-resistant films on the metal surfaces to prevent rust and corrosion. The Mobilarma Series oils absorb the water in systems into a water-in-oil emulsion so that the contact surfaces of the machinery still get satisfactory lubrication. Their high level of chemical stability and their anti-wear and detergent properties make them suitable as high quality short-term lubricants.

In most applications, the residual rust preventive films need not be flushed away when the assembly is filled with lubricating oil or hydraulic fluid and put back in service. However, flushing with a charge of lubricating oil to remove the Mobilarma product or its residual film, is recommended if:

- 1. The Mobilarma does not provide the required lubricant characteristics to operate the equipment at rated loads and temperatures
- 2. Draining of the equipment is difficult and considerable pockets of the Mobilarma cannot be easily removed
- 3. Contamination of the system oil by the Mobilarma could reduce the lubrication performance characteristics (examples; Mobilarma could increase Freon cloud point in compressors or water-in-oil emulsions reduce anti-wear characteristics in high pressure hydraulic systems)
- 4. Presence of the rust preventive agents reduces the ability of the new oil to separate water in turbine and similar equipment.

Features and Benefits

The Mobilarma 500 Series oils provide an excellent lubricant that also acts as a rust preventive. This allows safe lay-up of equipment that will not be used immediately. The equipment may be operated intermittently at low to moderate loads for short periods of time. These products provide excellent rust preventive performance reducing any potential damage that could otherwise occur in non-operating equipment. This saves clean-up and potential rigorous flushing procedures prior to placing the equipment back in service.

Features	Advantages and Potential Benefits
Excellent Rust and Corrosion Protection	High level protection against rust during seasonal lay-ups Reduced clean-up time required to place equipment back into production Displaces water from metal surfaces and forms tenacious protective films
Effective Anti-Wear Properties	Protects equipment against wear
Dual Purpose Lubricant/Rust-Preventive Nature	Reduced costs and time for run-in, testing or adjustment procedures Eliminates unnecessary flushing and draining steps

Applications

- Run-in oil and lay-up oil for engines and industrial equipment
- Turbines that will be out of service for long periods
- Hydraulic systems where water is present and the formation of emulsions will not effect operation
- Test calibration oil

Typical Properties

Mobilarma 500 Series	522	524
Viscosity, ASTM D 445		
cSt @ 40° C	28.8	88.4
cSt @ 100° C	5.0	10.5
Viscosity Index, ASTM D 2270	95	95
Pour Point, °C, ASTM D 97, max	-24	-18

Mobilarma 500 Series	522	524
Flash Point, °C, ASTM D 92, min	182	218
Density @ 15.6° C, Calculated, lbs/gal	7.3	7.36

Health and Safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ <http://www.msds.exxonmobil.com/psims/psims.as>
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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 properties may not be available locally. For more information, contact your local ExxonMobil contact or visit www.exxonmobil.com
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