



ENGINE OILS

ADDINOL PREMIUM STAR MX 1048

PRODUCT DESCRIPTION

ADDINOL Premium Star MX 1048 – a semi-synthetic fuel-economy oil of SAE class 10W-40 is the ideal formula for mixed fleets possessing excellent application properties.

APPLICATION

- Guarantees an excellent lubrication for passenger cars, transporters, heavy commercial vehicles and buses.
- Excellent suitability for RME-operations (biodiesel). Consider the reduction of oil change intervals as formulated in the new regulations of the vehicle manufacturers.

DELIVERY

Delivery preferable in drums and small cans.

SPECIFICATIONS / APPROVALS

Meets and exceeds the international specifications of:

- ACEA E7, A3/B4
- API SL/CI-4
- Global DH-1

Approved according to:

- MB-approval 229.1 and
- MB-approval 228.3
- MAN M 3275-1 (approval running)

Complies with the requirements of:

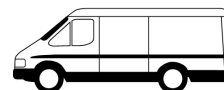
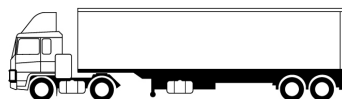
- Volvo VDS-3
- Renault RLD-2
- Deutz DQC III-10
- MTU Oil category 2
- MACK EO-N/EO-M Plus
- Caterpillar ECF-2
- Cummins 20078/77/76
- DAF

CHARACTERISTICS

- SHPD- and longlife characteristics
- Good cleaning capacity
- Excellent protection against wear and reduced friction
- Very good elastomer compatibility
- Reduced emission caused by the lubricant

ADVANTAGES AND BENEFITS

- Excellent lubricating and cooling performance
- Low fuel- and oil consumption
- Outstanding engine cleanliness
- Long engine lifetime
- Improved protection against leakages
- Outstanding environmental behaviour





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SPECIFICATIONS AND TYPICAL PARAMETERS

Feature	Test conditions / unit		Premium Star MX 1048	Method acc. to
Appearance			clear, free from contaminations	visual
Approvals			MB-approval 229.1 MB-approval 228.3 MAN M 3275-1 (running)	OEM standards
SAE-grade	J 300		10W-40	ASTM
ACEA			E7 A3/B4	Laboratory and engine tests acc. to ASTM and CEC
API			SL/CI-4	
Density	at 15°C	kg/m ³	860	DIN 51757
Viscosity	at 100°C	mm ² /s	14.98	ASTM D 7042
Viscosity index			165	DIN ISO 2909
HTHS-Viscosity	at 150°C	mPa*s	≥ 3.5	ASTM D 4683
TBN		mg KOH / g	11.7	DIN ISO 3771
Flash point	COC	°C	min. 230	DIN EN ISO 2592
Pour point		°C	max. -39	ASTM D 7346
Pumpability		°C	down to -30	ASTM D 4684

ADDINOL - The Experts for High-Performance Lubricants

We at ADDINOL develop and produce more than 600 high-performance lubricants of the new generation. Among these are automotive lubricants for highest demands and pioneering developments for industrial applications. Our customers all over the world benefit from the high and stable quality of our ADDINOL high-performance lubricants, our know-how and the individual customer advisory service of our competent experts. Our company has world wide activities. ADDINOL high-performance lubricants are distributed by more than 90 international partners.

The data given in this product sheet represent our current level of knowledge and experience. Due to the various specific application they do, however, not discharge the user from his own examination. The information provided herein may not be used to derive a legally binding warranty of specific properties or the suitability for a certain purpose of application. Detailed security-concerning and toxicological data as well as security instructions for each product can be taken from the corresponding Material Safety Data Sheets (MSDS). High-performance lubricants from ADDINOL are under continuous development. Therefore, ADDINOL Lube Oil GmbH keeps the right to change technical data in this product data sheet without notification. In case of doubt, please do not hesitate to contact our customers' advisory service.