



## ENGINE OILS

# ADDINOL SUPER TRUCK MD 1049

### PRODUCT DESCRIPTION

ADDINOL Super Truck MD 1049 is an UHPD engine oil in SAE-grade 10W-40 and is formulated on the basis of selected fully synthetic base oils combined with a high content of newly developed and highly efficient additive components.

ADDINOL Super Truck MD 1049 meets the extreme engine oil demands on the sensitive Euro III, Euro IV and Euro V generations of diesel engines. Euro VI only refers to Scania diesel engines.

The comprehensive constructional development of engine components assures the observance of the Euro V-emission limits, the usage of fuels with lowest sulphur content provided. Leading manufacturers of commercial vehicles have formulated the required demands on suitable engine oil and classified them in companies' approvals.

### APPLICATION

- Fulfills the comprehensive and high demands made on the lubricant by the Euro III, Euro IV and Euro V generations of commercial vehicles' engines excellently
- Outstanding suitability for RME-operations (biodiesel). Consider the reduction of oil change intervals formulated in the new regulations of vehicle manufacturers
- Not able for use in vehicles with DPF-systems - Manufacturer-related exceptions are possible!

### CHARACTERISTICS

- Best detergent-dispersant behaviour
- Excellent protection against wear and reduced friction
- Excellent viscosity-temperature behaviour
- Optimum rheology and friction reduction on moving engine components
- Best thermal-oxidative stability
- Low evaporation loss
- Very good elastomer compatibility
- Specific selection of components

### SPECIFICATIONS / APPROVALS

Meets and exceeds the international specifications of:

- ACEA E4/E7
- API CF

Approved according to:

- MAN M 3277
- MB-approval 228.5
- Scania LDF-3
- Volvo VDS-3
- MTU oil category 3
- Renault RLD-2
- Deutz DQC III-10
- MACK EO-N

Complies with the requirements of:

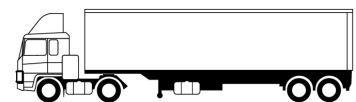
- DAF
- Renault RXD
- Other commercial vehicle manufacturers

### DELIVERY

Delivery preferable in drums, 20 l and 5 l cans.

### ADVANTAGES AND BENEFITS

- Excellent engine cleanliness, high engine lifetime
- Excellent protection against mechanical and corrosive wear
- Outstanding cold-start and warming-up performance, even at very low outdoor temperatures
- Fuel economy characteristics, fuel saving
- High ageing stability
- Low oil consumption
- Leakages are avoidable
- Very low environmental pollution by reduction emissions





# ADDINOL SUPER TRUCK MD 1049

## SPECIFICATIONS AND TYPICAL PARAMETERS

Feature	Test conditions / unit		Super Truck MD 1049	Method acc. to
Appearance			clear, free from contaminations	visual
Approvals			MAN M 3277 MB-approval 228.5 Volvo VDS-3 Scania LDF-3 MTU oil category 3 Renault RLD-2 Deutz DQC III-10 MACK EO-N	OEM standards
SAE-grade	J 300		10W-40	ASTM
ACEA			E 4/E7	Laboratory and engine tests acc. to ASTM and CEC
API			CF	
Density	at 15°C	kg/m <sup>3</sup>	867	DIN 51757
Viscosity	at 100°C	mm <sup>2</sup> /s	13.1	ASTM D 7042
Viscosity index			157	DIN ISO 2909
HTHS-Viscosity	at 150°C	mPa*s	≥ 3.5	ASTM D 4683
TBN			16	DIN ISO 3771
Flash point	COC	°C	min. 230	DIN EN ISO 2592
Pour point			max. -36	ASTM D 7346
Pumpability			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 70 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.