

How to choose the right engine and transmission oil – fast, simple, safe

The operating manual of your vehicle is decisive for the choice.

Under the point "engine oil" the manufacturer lays down which oil is allowed to be used.

Here the following details are given:

- ➔ viscosity and SAE-grade
- ➔ specifications.

The specifications have different combinations of numbers and/or letters. These combinations indicate the oil's type and the performance level required. The respective information is also given on all ADDINOL packaging and in this flyer. The combinations of numbers and letters are easy to understand.

Viscosity – it describes the oil's flow behaviour. Engine and transmission oils are classified into SAE-grades (Society of Automotive Engineers). The flow behaviour of the oil depends on the temperature. (In winter low viscosity oils SAE 10W or SAE 20W used to be applied. In summer one changed to highly viscous oil in SAE 40 or 50.) Modern multi-grade oils, as for instance ADDINOL Pole Position SAE 10W-50, are all-season oils ensuring reliable lubrication at all temperatures.

JASO – the specifications of the Japan Automobile Standards Organization apply primarily to Japanese vehicles. The JASO specifications are classified into group M for four-stroke engines and F for two-stroke engines. Oils belonging to group M are further divided into the categories MA and MB differing regarding their friction coefficients at wet clutches. Oils of category MA display a sufficient friction coefficient. They should not cause any problems even in motorbikes with high torque and relatively small clutches. The category MB describes oils meeting all criteria according to JASO except for a defined friction coefficient. This means their suitability for motorbikes with sensitive clutches is limited. Currently JASO MA-2 and JASO FD describe the highest requirements.

API – the American Petroleum Institute issues specifications for gasoline and diesel engine oils as well as transmission oils based on strict testing

Handed over by:

methods. Class S is valid for **four-stroke engine oils**, T for **two-stroke engine oils**. The second letter indicates the requirement level. At the moment, API SM describes the highest specification for four-stroke engines. Class API TC* is a classification of lubricant manufacturers and means that the specification API TC is outperformed; i.e. the performance level is between API TC and API TD. **Transmission oils** are classified into the specifications GL 3/GL 4 and GL 5 according to API. API GL 3: mild addition (EP-additives), for manual and special transmissions as well as axle drives at low to medium requirements API GL 4: for heavy loaded manual and special transmissions, for hypoid geared axle drives at normal operating conditions API GL 5: for heavy loaded hypoid geared axle drives with large offset, to some degree also for manual and special transmissions

ISO – oils for two-stroke motorbikes are also classified according to the guidelines of the International Organization of Standardization – Lubricant in Europe. Here currently valid ISO-classes are EGB, EGC and EGD with ISO-L-EGD describing the highest performance at the moment.

Please follow the operating instructions of your vehicle manufacturer!

ADDINOL Expertise since 1936

It began in 1936. In this year the mineral oil plant Lützkendorf was founded in Krumpa and became one of Germany's largest refineries for the production of fuel and lubricants in the course of time. Research and development were highly important from the very beginning. High-performance lubricants of the mineral oil plant Lützkendorf, like the engine oil ADDINOL Super, became a synonym for quality and progress. ADDINOL – Additives in Oil – was one of the most famous brands of the GDR. After the German Unification the company changed its name to ADDINOL.

The ADDINOL Lube Oil GmbH moved its headquarters to Leuna in Saxony-Anhalt in 2000. Here ADDINOL develops and produces innovative high-performance lubricants. Among these are automotive lubricants for highest requirements with current approvals of leading engine manufacturers as well as pioneering developments for industrial applications. ADDINOL engine and transmission oils meet the highest specifications. ADDINOL offers the optimal product for almost every vehicle. Customers all over the world benefit from the high and constant quality of the ADDINOL high-performance lubricants, our know-how and the individual customer service provided by the competent experts at ADDINOL.

The brand new product range – Pole Position – ensures optimum performance for modern four-stroke engines of motorbikes under all conditions and meets JASO MA-2, which is currently the highest specification.

Special products

ADDINOL CHAIN ADHESIVE SPRAY Special lubricant for chains, semi-synthetic

- ➔ for on- and off-road bikes
- ➔ transparent lubricating film which stands high loads
- ➔ permeates into chain links, optimum adhesion, no throwing off
- ➔ reliable protection against humidity and corrosion
- ➔ prolongs lifetime of chains
- ➔ extreme temperature range: -30 °C up to +130 °C

ADDINOL MULTIFUNCTIONAL SPRAY Universal lubricant with graphite

- ➔ universal lubricant for all mechanical components
- ➔ lubricates, protects and maintains
- ➔ excellent emergency lubricating properties
- ➔ outstanding penetrating properties
- ➔ high resistance to humidity
- ➔ temperature range: -40 °C up to +90 °C

ADDINOL UNIVERSAL CLEANING SPRAY Cleaner for brakes and chains, degreaser

- ➔ dissolves greases, oils, tar, metallic deposits and dirt
- ➔ does not leave any residues
- ➔ does not attack seals and rubber
- ➔ can be used at all weather conditions

ADDINOL KO 6-F SPRAY Anti-corrosion fluid, versatile usage

- ➔ reliable protection against corrosion
- ➔ forms an even, waxy film after evaporation of solvent
- ➔ outstanding water-displacing effect
- ➔ excellent penetrating properties

ADDINOL CREEP OIL Highly efficient against humidity and creeping currents

- ➔ also for the temporary protection of metallic surfaces
- ➔ excellent water-displacing effect
- ➔ loosens rusty connections e. g. screwed connections

ADDINOL BRAKE FLUID Brake fluid DOT 4, fully synthetic

- ➔ for hydraulic brake and clutch systems
- ➔ high boiling point > 250 °C, wet boiling point > 155 °C
- ➔ maximum safety also at high loads
- ➔ fulfils: FMVSS 116; DOT 3 and 4; SAE J 1704/1703; ISO 4925 Class 4
- ➔ Not miscible with brake fluids based on mineral oil!

ADDINOL SHOCK ABSORBER OIL B Fork oil based on mineral oil

- ➔ for shock absorbers and forks
- ➔ outstanding damping characteristics
- ➔ high suspension comfort
- ➔ outstanding wear protection
- ➔ viscosity: SAE 5W

ADDINOL MULTI-PURPOSE GREASE L 2 and L 2 G Universal greases for many applications

- ➔ L 2 G with graphite providing emergency lubricating properties
- ➔ easy to process
- ➔ outstanding water resistance
- ➔ also fit as sealant to protect against dirt and corrosion
- ➔ consistency grade NLGI 2
- ➔ temperature range: -30 °C up to +120 °C

ADDINOL ANTIFREEZE SUPER Cooler protecting concentrate

- ➔ very fit for modern lightweight engines
- ➔ optimal compatibility with aluminium and aluminium alloys
- ➔ reliable protection against frost, corrosion and overheating
- ➔ free of nitrite, amine and phosphate



www.addinol.de



➔ **ADDINOL Lubricants**
for Motorbikes, Scooter, Karts and Quads





Engine oils for four-stroke motorbikes

ADDINOL POLE POSITION

High-tech four-stroke engine oils for motorbikes of the latest type. Exceed JASO MA-2, can also be applied in older vehicles according to JASO MA.

- enable optimum engine performance
- no slipping at wet clutches
- stand high thermal loads
- safe lubrication even under extreme conditions
- reliable protection against corrosion and wear
- excellent engine cleanliness
- fuel-efficient behaviour for economical consumption

Pole Position SAE 10W-30 and Pole Position SAE 10W-40 are based on high-quality synthetic oils, Pole Position SAE 10W-50 and Pole Position SAE 20W-50 on fully synthetic components.

SAE 10W-30, JASO MA-2, API SM
SAE 10W-40, JASO MA-2, API SM
SAE 10W-50, JASO MA-2, API SM
SAE 20W-50, JASO MA-2, API SM



ADDINOL SUPER VISCO MV 1066

Fully synthetic, fuel-efficient oil for high-tech four-stroke engines.

- good cold start behaviour and stable lubricating film at high operating temperatures
- ideal for high loads on- and off-road
- protection against corrosion and wear
- excellent cleaning properties
- fuel-efficient characteristics

SAE 10W-60; JASO MA; API SJ



ADDINOL ENGINE OIL M 30 and M 50

Special engine oils for vintage vehicles.

- based on mineral oil, mild additivation
- high ageing stability
- excellent viscosity-temperature-behaviour

M 30: SAE 30, API SA
M 50: SAE 50, API SA



Engine oils for two-stroke motorbikes, scooter and karts

ADDINOL SUPER BIKE RACING 2T

- Fully synthetic, self-mixing high-performance engine oil for air- and water-cooled two-stroke engines (mixed or fresh-oil automatics lubrication) exposed to high thermal loads.
- tested under hardest conditions in motocross
- environment-friendly – biodegradable

ISO-L-EGD; JASO FC; API TC (TC+)
Mixing ratio up to 1 : 100



ADDINOL SUPER SYNTH 2T MZ 408

- Fully synthetic, self-mixing high-performance engine oil for air- and water-cooled two-stroke engines (mixed or fresh-oil automatics lubrication) exposed to high thermal loads.
- environment-friendly – biodegradable

ISO-L-EGD; JASO FC; API TC (TC+)
Mixing ratio up to 1 : 100



ADDINOL SUPER 2T MZ 406

- Synthetic, self-mixing high-performance engine oil for air- and water-cooled two-stroke engines (mixed or fresh-oil automatics lubrication) exposed to high thermal loads.
- environment-friendly because of "low smoke" character

ISO-L-EGD; JASO FC; API TC
Mixing ratio up to 1 : 50



ADDINOL SUPER MIX MZ 405

- For classic vehicles
- Mineral oil based, self-mixing high-performance engine oil for air- and water-cooled two-stroke engines (mixed or fresh oil automatics lubrication) exposed to high thermal loads.

ISO-L-EGD; JASO FB; API TC
Mixing ratio up to 1 : 50



ADDINOL Engine oils	SAE	Base oil	Specifications	
4T	Pole Position SAE 10W-30	10W-30	synthetic	API SM/SL/SJ/SH; JASO MA-2/MA
4T	Pole Position SAE 10W-40	10W-40	synthetic	API SM/SL/SJ/SH; JASO MA-2/MA
4T	Pole Position SAE 10W-50	10W-50	fully synthetic	API SM/SL/SJ/SH; JASO MA-2/MA
4T	Pole Position SAE 20W-50	20W-50	fully synthetic	API SM/SL/SJ/SH; JASO MA-2/MA
4T	Super Visco MV 1066	10W-60	fully synthetic	API SJ; JASO MA
4T	M 30	30	mineral	API SA
4T	M 50	50	mineral	API SA
2T	Super Bike Racing 2T		fully synthetic	API TC+; JASO FC; ISO-L-EGD
2T	Super synth 2T MZ 408		fully synthetic	API TC+; JASO FC; ISO-L-EGD
2T	Super 2T MZ 406		synthetic	API TC; JASO FC; ISO-L-EGD
2T	Super mix MZ 405		mineral	API TC; JASO FB; ISO-L-EGD

ADDINOL Transmission oils	SAE	Base oil	Specifications	
Transmission	GS 75W-90	75W-90	semi-synthetic	API GL-4
Transmission	GS 80W	80W	mineral	API GL-4
Transmission	GS 80W-90	80W-90	mineral	API GL-4
Transmission	GS 85W-90	85W-90	mineral	API GL-4
Transmission	GH 80W-90	80W-90	mineral	API GL-5
Transmission	GH 80W-140	80W-140	mineral	API GL-5
Transmission	GH 85W-90	85W-90	mineral	API GL-5
Transmission	GH 85W-140	85W-140	mineral	API GL-5
Transmission	GL 80W	80W	mineral	API GL-3
Transmission	GL 90	90	mineral	API GL-3
Transmission	GL 140	140	mineral	API GL-3

