

#### ADDINOL – German Quality 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. Especially for motorbikes, scooters, karts and quads the ADDI-NOL portfolio offers a whole range of oils for two-stroke and four-stroke engines, transmission oils as well as products for maintenance and care.

The Pole Position series ensures optimum performance for modern four-stroke and two-stroke engines of motorbikes under all conditions and meets JASO MA-2 and JASO FD respectively, which are currently the highest specifications. For classic vehicles with their special requirements we provide the tried and tested engine and transmission oils all the same. And a selection of handy sprays and the right function fluids completes our range.

ADDINOL – Improve the performance!

#### ADDINOL Lube Oil GmbH

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Handed over by:

### How to choose the right 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. Currently JASO MA-2 and JASO FD describe the highest requirements for four-stroke and two-stroke engines respectively.

**API** – the American Petroleum Institute issues specifications for gasoline and diesel engine oils as well as transmission oils based on strict testing 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 SN describes the highest specification for four-stroke engines. Class API TC<sup>+</sup> 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.

**ISO** – oils for two-stroke motorbikes are also classified according to the lubricant guidelines of the International Organization of Standardization (ISO-L) 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!



Maintenance and care

### ADDINOL Brake Fluid and ADDINOL Brake Fluid DOT 5.1 Fully synthetic brake fluids

- > for hydraulic brake and clutch systems
- > high dry and wet boiling point
- > maximum safety also at high loads
- Brake Fluid fulfils: FMVSS 116 DOT 4/3, SAE J 1704/1703, ISO 4925 Class 4
- DOT 5.1 fulfils: FMVSS 116 DOT 5.1/4/3, SAE J 1704, ISO 4925 Class 5-1
- > Not miscible with brake fluids based on mineral oil!

### ADDINOL Antifreeze Super

### Cooler protecting concentrate

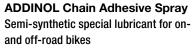
- > very fit for modern lightweight engines
- > optimal compatibility with aluminium and aluminium alloys
- > reliable protection against frost, corrosion and overheating
- > free of nitrite, amine and phosphate

### ADDINOL THE ART OF OIL SINCE 1930



### 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



- > 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

- > lubricates, protects and maintains
- > excellent emergency lubricating 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

ADDINOL KO 6-F Sprav

> forms an even, waxy film after

> excellent penetrating properties

evaporation of solvent

- > does not attack seals and rubber
- > can be used at all weather conditions

Anti-corrosion fluid, versatile usage

> outstanding water-displacing effect

# 8

### 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 Lubricants for Motorbikes, Scooters, Karts and Quads











## 4-Stroke

### > Engine oils for four-stroke motorbikes



For air- and water-cooled four-stroke engines with highest performance

### 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 use

### SAE 5W-40. SAE 10W-40.

SAE 10W-50, SAE 20W-50

JASO MA-2, API SN

### ADDINOL Super Racing 10W-60

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-2, API SM

# 2-Stroke

> Engine oils for two-stroke motorbikes, scooters and karts



For air- and water-cooled two-stroke engines exposed to high thermal loads

### ADDINOL Pole Position High Speed 2T

- > ideal for high requirements in motocross and on-road races
- > optimum protection against corrosion and wear for long engine lifetimes
- > does not contain any pre-mix components, mixing ratio according to manufacturer instructions

ISO-L-EGD, JASO FD

### ADDINOL Super Synth 2T MZ 408

> environment-friendly – biodegradable self-mixina ISO-L-EGD, JASO FD, API TC (TC<sup>+</sup>) Mixing ratio up to 1 : 100 Please follow the instructions of your vehicle manufacturer!

### ADDINOL Super 2T MZ 406

> environment-friendly because of "low smoke" character > self-mixing ISO-L-EGC, JASO FC, API TC Mixing ratio up to 1 : 50 Please follow the instructions of your vehicle manufacturer!

### Classics

### > Engine oils for Classic Bikes

> Transmission oils



Older engines should not be operated with modern lubricants. They require special engine oils without or with minor additivation only.

### ADDINOL Engine oil M 30 and M 50

Special engine oils for vintage vehicles

> no additivation high ageing stability > excellent viscosity-temperature-behaviour M 30: SAE 30, API SA M 50: SAE 50, API SA

### ADDINOL Super Mix MZ 405

- > for classic vehicles
- > self-mixing high-performance engine oil for air- and water-cooled twostroke engines (mixed or fresh oil automatics lubrication) exposed to high thermal loads

### ISO-L-EGB, JASO FB, API TC

Mixing ratio up to 1 : 50 Please follow the instructions of your vehicle manufacturer!





### Transmissions



ADDINOL transmission oils for an optimal starting and warmingup behaviour. They lubricate reliably, stand high loads and protect against corrosion and wear.

### ADDINOL Transmission oils of the GH series

> with highest shear stability and excellent viscosity-temperature-

behaviour for a wide temperature range > meet API GL 5 (for heavy loaded hypoid geared axle drives with large

offset, to some degree also for manual and special transmissions)

### ADDINOL Transmission oils of the GS series

> universal application, for optimum protection

> meet API GL 4 (for heavy loaded manual and special transmissions, for hypoid geared axle drives at normal operating conditions)

### ADDINOL Transmission oils of the GL series

> highly fit for older vehicles, reliable protection also for material pairings typical of classic cars

> meet API GL 3 (mild additivation (EP-additives), for manual and special transmissions as well as axle drives at low to medium requirements)

ADDINOL Engine oils		SAE	Specifications
4-stroke	Pole Position SAE 5W-40	5W-40	API SN, JASO MA-2/MA
	Pole Position SAE 10W-40	10W-40	API SN, JASO MA-2/MA
	Pole Position SAE 10W-50	10W-50	API SN, JASO MA-2/MA
	Pole Position SAE 20W-50	20W-50	API SN, JASO MA-2/MA
	Super Racing 10W-60	10W-60	API SM, JASO MA-2/MA
2-stroke	Pole Position High Speed 2T		JASO FD, ISO-L-EGD
	Super Synth 2T MZ 408		API TC⁺, JASO FD, ISO-L-EGD
	Super 2T MZ 406		API TC, JASO FC, ISO-L-EGC
Classics 4-stroke	M 30	30	API SA
	M 50	50	API SA
Classics 2-stroke	Super Mix MZ 405		API TC, JASO-FB, ISO-L-EGB

ADDINOL Transmission oils	SAE	Specifications
GH 80W-90	80W-90	API GL-5
GH 80W-140	80W-140	API GL-5
GH 85W-90	85W-90	API GL-5
GH 85W-140	85-140	API GL-5
GS 75W-90	75W-90	API GL-4
GS 80W-90	80W-90	API GL-4
GS 85W-90	85W-90	API GL-4
GS 85-140	85W-140	API GL-4
GL 80W (previously GL 100, GL 60, GH 60)	80W	API GL-3
GL 90 (previously GL 220, GL 125, G 15, G 20)	90	API GL-3
GL 140 (previously GL 460, GL 240, GL 265, GHD)	140	API GL-3