



PRODUCT INFORMATION **GERMAN ADLER SYNT SAE 5W-30 HC-LA**

GERMAN ADLER SYNT SAE 5W-30 HC-LA is a semi-synthetic high performance motor oil, which meets par excellence the highly exalted tribological requirements of the EURO 5- and EURO 6 - commercial car engine generation.

Description

GERMAN ADLER SYNT SAE 5W-30 HC-LA falls below the limits for sulphated ash, sulphur- and phosphorus content (Low SAP's), regulated by law as from 2008 and thus provides one of the basis for the trouble-free operating of downstream exhaust gas treating devices (particle filter), which makes it possible to meet the EURO 5- and 6 -standard for diesel engines.

Application

GERMAN ADLER SYNT SAE 5W-30 HC-LA assures top performance at the quality criterions wear protection and friction reduction, detergency & dispersancy, corrosion prevention, viscosity temperature dependency, thermal oxidative stability, low evaporation tendency, good elastomer compatibility and few enviromental impact.

GERMAN ADLER SYNT SAE 5W-30 HC-LA ensures the EURO 5- and -6 - turbo charged diesel engines extremely extended drain intervals, excellent motor cleanliness, very good cold starting and warmup performance even at lowest temperatures, outstanding aging resistance, reliable lubrication under all operation conditions and reduced pollution of noxious matter caused by the lubricant.

In compliance to EEC regulations the quality of GERMAN ADLER SYNT SAE 5W-30 HC-LA is equivalent according to the following standards / specifications:

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|----------------------------|----------------------------|
| • ACEA E7/E8/E11/E4 | • Mack EO-N Premium Plus |
| • API CJ-4 | • Mack EO-M Plus |
| • CAT ECF-3 | • MAN M 3677/M 3477/M 3691 |
| • Cummins CES 20081 | • MAN M 3271-1/M 3575 |
| • DAF | • MB 228.51/228.31/235.28 |
| • Detrot Diesel DDC 93K218 | • MTU Type 3.1 und 2.1 |
| • Deutz DQC IV-10 LA | • Renault Truck RLD-3 |
| • Iveco | • Scania LA und LDF 4 |
| • JASO DH 2 | • Voith Retarder Class B |
| • Mack EO-O Premium Plus | • Volvo VDS-4 |

Advantages/Benefits

- EURO 5- and -6 - turbo charged diesel engines extremely extended drain intervals
- Excellent cold start behaviour even under extreme low temperature conditions
- Outstanding aging resistance
- reliable lubrication under all operation conditions and reduced pollution of noxious matter caused by the lubricant
- Reliable all-season operation due to excellent viscosity-/ temperature behaviour and high shear stability
- Protects against corrosion and black sludge
- Very high oxidation resistance due to selected HC-synthesis and fully synthetic PAO base oils in combination with extraordinary additive technology



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Typical characteristics:

	Unit	Value	Method
Density at 15°C	kg/m ³	854	DIN 51 757
Viscosity at 40°C	mm ² /s	73,5	DIN 51 562
Viscosity at 100°C	mm ² /s	12,2	DIN 51 562
Viscosity index		164	DIN ISO 2909
Dynamic viscosity at -25°C	mPa.s	6360	DIN 51 377
Pour point	°C	-36	DIN ISO 3016
Flash point	°C	228	DIN ISO 2592
TBN	mg KOH/g	11,1	DIN ISO 3771
Sulphated ash	mass. %	0,9	DIN 51 575

The above data are true and correct to the best of our knowledge and belief and reflect the current state of knowledge and our development effort. All rights to changes reserved! The characteristic data indicated are subject to the repeatability and reproducibility of the given test methods.