

TECHNICAL PRODUCT SHEET

PRO V1 LL

0W—30, 5W—30



DESCRIPTION

PRO V1 LL family is a top-tier synthetic mid-SAPS lubricant engineered for VW Group engines requiring the 504.00/507.00 specification. Its low-viscosity, high-protection formulation delivers reinforced anti-wear performance for modern engines with tight tolerances, while ensuring full compatibility with DPF after-treatment systems. The oil provides exceptional cleanliness, strong film strength, and superior lubricity to prevent oil-film breakdown and reduce friction in high-pressure zones. PRO V1 LL is also fully backward compatible with earlier VW standards, including 502.00, 505.00, 505.01, 503.00, 503.01, 506.00, and 506.01.

APPLICATIONS

PRO V1 LL family is recommended for high-performance Euro 6, 5, and 4 four-stroke gasoline and light diesel engines, including naturally aspirated and turbocharged units with advanced multi-valve, computer-controlled FSI or common-rail systems. It is ideal for service-fill applications in VW engines equipped with modern TWC, GPF, and DPF systems operating under long-life maintenance schedules. Its formulation also supports the lubrication requirements of the latest engine technologies used in plug-in hybrid vehicles across European and Asia-Pacific markets, ensuring stable protection, low emissions compatibility, and reliable performance under demanding operating conditions.

SPECIFICATIONS

API	SQ	VW	Performance level 504.00
API	SP	VW	Performance level 507.00
API	SN	VW	Backwards compatible: VW 502.00,
ACEA	C3	VW	Backwards compatible: VW 503.00 VW 503.01
ACEA	C2	VW	Backwards compatible: VW 505.00, VW 505.01
BMW	LongLife-04	VW	Backwards compatible: VW 506.00, VW 506.01
MB	229.51		

PROPERTIES

PRO V1 LL family is premium low-viscosity PCMO lubricants formulated to deliver high fuel-efficiency performance through their exceptionally low friction coefficient, significantly reducing mechanical losses in modern engines. Their advanced detergent and dispersant system ensures outstanding piston cleanliness and effective deposit control. The mid-SAPS technology provides enhanced protection for engines prone to LSPI, supporting reliable operation and long-term durability.

BENEFITS

PRO V1 LL formula reduces fuel and oil consumption through its low-friction chemistry while providing exceptional start-up wear protection for critical components. It delivers measurable fuel-economy benefits that support lower overall operating costs. Its robust sludge-control system prevents oil starvation and mitigates engine-failure risks. Fully compatible with GPF/DPF aftertreatment systems, it also helps prevent pre-ignition events that can lead to severe engine damage.



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PHYSICAL-CHEMICAL CHARACTERISTICS

PRO V1 LL	METHOD	SAE 5W-30	SAE 0W-30
Density at 15°C, g/cm ³	ASTM D4052	0.850	0.840
Dynamic viscosity, °C/cP	ASTM D5293	-30°C/5,800	-35°C/6,100
Viscosity, Kinematic (cSt) 100°C	ASTM D445	12.0	12.1
Viscosity, Kinematic (cSt) 40°C	ASTM D445	71.6	67.5
Viscosity index	ASTM D2270	165	177
TBN, mgKOH/g	ASTM D2896	8.2	8.0
Flash point, COC, °C	ASTM D92	232	228
Pour point, °C	ASTM D97	-39	-42
HTHS Viscosity @150°C, cp	ASTM D4683	3.65	3.52

The abovementioned characteristics represent mean values.

STORAGE

All packages must be stored in covered, well-ventilated areas. If outdoor storage cannot be avoided, barrels must be placed horizontally to prevent water ingress and to protect labels and markings from damage. Products must not be stored at temperatures above 60 °C and must not be exposed to direct sunlight, freezing conditions, or extreme temperature fluctuations.



HEALTH & SAFETY

This product is not considered to pose significant risks to health or safety when used as intended and in accordance with recommended personal hygiene practices. It must not be applied for purposes other than those for which it has been formulated. For detailed guidance on safe handling and use, refer to the Safety Data Sheet (SDS).



USED OILS

Used lubricants must be collected at designated collection points to prevent environmental contamination. They must not be mixed with solvents, brake fluids, or antifreeze.

