

The Mercedes-Benz SL 65 AMG *Black Series* - the exclusive high-performance coupé for the discerning motorist

Press information

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Affalterbach – Sensational appearance, unique performance data, with light-weight design throughout and total exclusivity - that's the new Mercedes-Benz SL 65 AMG *Black Series*. This high-performance coupé is a motorsport engineering thoroughbred, opening up new drive dynamic vistas to sports car enthusiasts. The AMG 6.0 litre V12 biturbo engine, with a maximum output of 493 kW/670 hp and 1000 Newtonmetres of torque, guarantees super sports car level performance. The powerful two-seater was developed in the AMG *PERFORMANCE STUDIO* and represents the continuation of the highly successful *Black Series* strategy pursued by AMG, the Mercedes-Benz Cars Performance brand.

Broad, muscular and ready to pounce - that's the new Mercedes-Benz SL 65 AMG *Black Series*. Even when stationary, the coupé's superlative dynamism can arouse great passions. The strikingly broad mudguards, the retractable rear spoiler and the rear apron with diffuser fins point unmistakably to its motorsport origins, part of the Mercedes-AMG corporate philosophy for more than 40 years. One glance at the new SL 65 AMG *Black Series* and you are reminded of the successful

AMG racing sports cars like the present DTM C-Class or the 1997 CLK-GTR from the FIA-GT series. Page 2

Wide cooling air apertures in the front apron and the bonnet are the clearest indication of the massive power of this AMG twelve-cylinder, biturbocharged engine. From its 5980 cubic capacity, the AMG V12's engine generates a maximum power of 493 kW/670 hp at 5400 rpm and an electronically limited torque of 1000 Newtonmetres between 2200 and 4200 rpm. Without a limiter, the AMG 6.0 litre V12 biturbo engine, which is hand-built in the AMG engine factory in accordance with the "one man - one engine" philosophy, would achieve a maximum torque of 1200 Newtonmetres. Compared with the basis power pack in the 450 kW/612 hp SL 65 AMG, new turbochargers were developed for the twelve-cylinder SL 65 AMG *Black Series* engine. The turbochargers' spiral cross-section, now twelve per cent larger, and the optimised wastegate ducts permit increased air throughput and an even more impressive display of power in all engine speed ranges. The modified intake air ducting results in an even more spontaneous response. The new design for the AMG sports exhaust gas system's rear silencers reduce the exhaust gas backpressure and help increase the power output. The acoustic side effect of this is to produce a distinctive twelve-cylinder sound, typically evocative of AMG engine tuning, from the two trapezoidal tail pipes. The low-temperature charge air cooler, now 30 per cent more powerful, and the optimised water cooling system guarantee not only that the power generated under extreme dynamic driving conditions is exploited to the maximum but also the greatest possible fatigue strength at high outside temperatures.

Unique performance thanks to attractive power-to-weight ratio

The extraordinary engine specifications, which make the SL 65 AMG *Black Series* the most powerful AMG model yet, help to produce unique performance data: from a standing start, it takes just 3.9 seconds to reach 100 km/h; top speed is 320 km/h (electronically limited).

The most important data are summarised below:

		SL 65 AMG <i>Black Series</i>
Configuration and number of cylinders, valves per cylinder		V12 3
Cubic capacity	cm³	5980
Bore x stroke	mm	82.6 x 93.0
Compression ratio		9.0: 1
Power output	kW/hp at rpm	493/670 5400
Max. torque	Nm at rpm	1000* 2200-4200
Acceleration 0-100 km/h	s	3,9
Top speed	km/h	320*

- electronically limited.

Equally responsible for its excellent dynamics is the attractive power-to-weight ratio of only 2.79 hp/kg, resulting from the comparably low unladen weight of 1870 kilograms, according to EU standard measurement. This makes the SL 65 AMG *Black Series* some 250 kilograms lighter than the SL 65 AMG - a respectable weight saving due specifically to the use of lightweight construction. Numerous bodywork components are made of high-strength and particularly light carbon fibre composites (CFRP), a well-proven motorsports technology. The 14 centimetre wider front mudguard, the front apron with the visible carbon front splitter, the bonnet and the boot lid are all made from CFRP. Large apertures in the bonnet ensure that excess heat is reliably ducted away from the engine. "V12 Biturbo" lettering on the front mudguards gives an indication of the engine's power.

New CFRP roof with integral roll-over bar

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The whole CFRP roof shell has taken on a completely new design. Not only does it now have an integral roll-over bar but, by no longer having the typical SL vario roof installed, the roof line has a significantly flatter profile. This is also evident from a glance at the bigger rear window, now placed at a less sharp angle to the boot lid. The CFRP rear spoiler, concealed in the boot lid, automatically extends twelve centimetres at 120 km/h, effectively reducing the lift force on the rear axle at high speeds. Looked at from the rear, the conspicuous feature is the new rear apron with its visible carbon diffuser. Concealed within it is the active cooling system for the rear axle locking differential.

New, weight-optimised, twin-spoke design, AMG forged alloy wheels - 19 inch wheels at the front and 20 inch at the rear - impressively occupy the whole of each wheel housing. With their black paintwork, high-sheen surface and matt finish, they lend a note of extravagance to the side profile.

Power transmission with double-declutch function and four transmission modes

Matching the outstanding performance potential and the versatile drive dynamics, the SL 65 AMG *Black Series* also displays its power pack and suspension at their best. An AMG SPEEDSHIFT PLUS five-speed automatic gearbox transmits power to the rear wheels. There is a choice between four transmission modes: "C", "S", "M1" and "M2" which has gearshift times 25 per cent quicker than the "M1" mode. The torque converter's lockup clutch guarantees extremely direct gearshifting in all driving situations right from first gear. The automatic double-declutch function not only makes shifting down a more pleasurable task, it also ensures that the load alteration effect is reduced.

AMG adjustable coil spring sports suspension and 3-stage ESP®

As for the suspension, the AMG experts have put their trust in a new design. The AMG sports suspension has been designed on adjustable coil spring lines; this well-proven motorsports solution allows the shock absorbers' rebound and

compression stages, the ride height, wheel alignment and camber to be adjusted. This means that the driver can adjust the suspension to suit his own personal specifications when driving on racing circuits. The spring links, camber struts and pull/push rods on both axles are new developments and each axle has a weight-optimised aluminium wheel carrier. Compared with the standard SL 65 AMG, the *Black Series* front axle track width is 97 millimetres wider and the rear axle track width 85 millimetres wider. The new front axle kinematics produce an 8 per cent more direct steering ratio; and the completely re-designed elastokinematics ensure noticeably greater steering precision. A multiple-disc limited-slip differential on the rear axle with a 40 per cent locking effect guarantees optimum traction.

The 3-stage sports function ESP[®] is a by-word for maximum driving pleasure and outstanding drive dynamics: The driver can choose between "ESP ON", "ESP SPORT" and "ESP OFF" by pressing the ESP[®] button; the AMG instrument cluster will then show whichever mode is currently activated on the central display.

Sports tyres and composite disc brakes for best performance

The wheel-tyre combination chosen is also responsible for a superb performance by the SL 65 AMG *Black Series* on racing circuits. 265/35 R 19 tyres are fitted to 9.5 inch wide AMG light-alloy wheels on the front axle. The impressive format for the rear axle is AMG 11.5 x 20 light-alloy wheels with 325/30 R 20 tyres. Dunlop, DTM's motorsports partner, supplies the "Sport Maxx GT" sport tyres which provide particularly good grip and permit astonishing cornering speeds.

The large AMG high-performance brake system can be seen through the filigree structure of the AMG twin-spoke light-alloy wheels. Internally ventilated and perforated disc brakes engineered in particularly strong composite materials are employed all round. On the front axle, braking is undertaken by six-piston fixed callipers and 390 x 36 mm discs; on the rear axles, this task is carried out by four-piston fixed callipers and 360 x 26 mm discs.

A functional and lovingly designed interior

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Nappa leather, Alcantara and carbon: the interior of the SL 65 AMG *Black Series* provides the perfect ambience to set the pulses of sports car enthusiasts racing. The interior, entirely in black, exudes the functional atmosphere of a genuine racing sports car while the lovingly designed details have the power to captivate.

Newly developed AMG sports bucket seats made of CFRP (ECE version only) provide perfect lateral support for the occupants when taking bends fast. The seats without side airbags are upholstered in fine-grained nappa leather and Alcantara with embossed AMG lettering in the head restraints. With its 15 millimetre smaller diameter, flattened lower profile and with both sides perforated for easier grip, the AMG Performance steering wheel provides maximum vehicle control. The silver-coloured aluminium shift paddles allow manual gear selection.

Additional highlights in the centre console are the high-quality carbon trim parts, the gleaming matt start/stop button, the new selector lever with carbon inlay and the AMG logo with "*Black Series*" lettering. Matching features are the carbon door centre panels with embossed AMG lettering, together with the roof lining and the A and C-pillars upholstered in Alcantara anthracite.

The AMG instrument cluster is a completely new design. The black speedometer with its scale reading up to 360 km/h has also been re-designed; and the same is true of the white rev counter which has four integral LEDs to advise the driver of the optimum gearshift points.

Exhaustive development in all the world's climate zones

Exhaustive development and testing of the SL 65 AMG *Black Series* began in 2006. AMG engineers and technicians test drove ten prototypes and experimental vehicles in all the world's climate zones. Whether it was fast circuits of the Nürburgring, high-speed test driving in Nardo (Italy), wind tunnel testing, intensive test driving in summer heat or the cold of the Arctic or actual crash

testing – the new AMG high-performance coupé had to prove its production readiness under all conditions. In total, the SL 65 AMG *Black Series* was test-driven for roughly 30,000 kilometres on various circuits, 15,000 kilometres of which were on the Nürburgring north loop alone, acknowledged to be the world's most difficult race circuit.

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Like the SLK 55 AMG *Black Series* and the CLK 63 AMG *Black Series* before it, the SL 65 AMG *Black Series* was also developed in the AMG *PERFORMANCE STUDIO*, which opened in 2006. Further information about the SL 65 AMG *Black Series* is on the Mercedes-AMG website under www.mercedes-amg.com.

Mercedes-Benz Australia/Pacific has confirmed a limited number will be coming to Australia, with pricing to be confirmed early 2009.