



GRAFE

FUTURE IN PLASTICS



BASE BLACK
AUTOMOTIVE
MASTERBATCH



GRAFE is specialist for modifying thermoplastics. From our plant located in Blankenhain, we deliver products to customers all over the world.

Base Black - One masterbatch for all OEM black color shades, flexible to adjust, cost-efficient and quickly available!

QUALITY

All divisions in our group are certified and work in strict accordance with the standards DIN EN ISO 9001, IATF 16949 and ISO EN 50001.

Before our products are sent out for delivery, they are inspected by our expert quality team at our own in-house lab using state-of-the-art testing equipment.

CUSTOMER PROXIMITY

Thanks to our experience and flexibility in the various manufacturing processes, our customers are delivered their products quickly and directly. The special requirements of our customers present a challenge to our researchers and drive the development of new products which pave the way for future innovation. Customer proximity lies at the heart of our company's philosophy.

INNOVATION

GRAFE has outstanding development capabilities. This is illustrated by the fact that we have one third of our staff working in our laboratories and technical applications center.

In cooperation with globally operating research institutes, our focus lies on the development of innovative products. Over the past years, we have led the way in important research projects whose results have revolutionized the market.

COMPETENCE

Since the founding of our company in 1991, we have been active in the most innovative area of the dynamic plastics market. Plastic products are becoming increasingly sophisticated and are replacing a growing number of traditional materials. At the same time, this raises the requirements on the raw materials they are made from. Our in-depth experience and extensive know-how enable us to offer our customers products which are excellently positioned for success in the market.

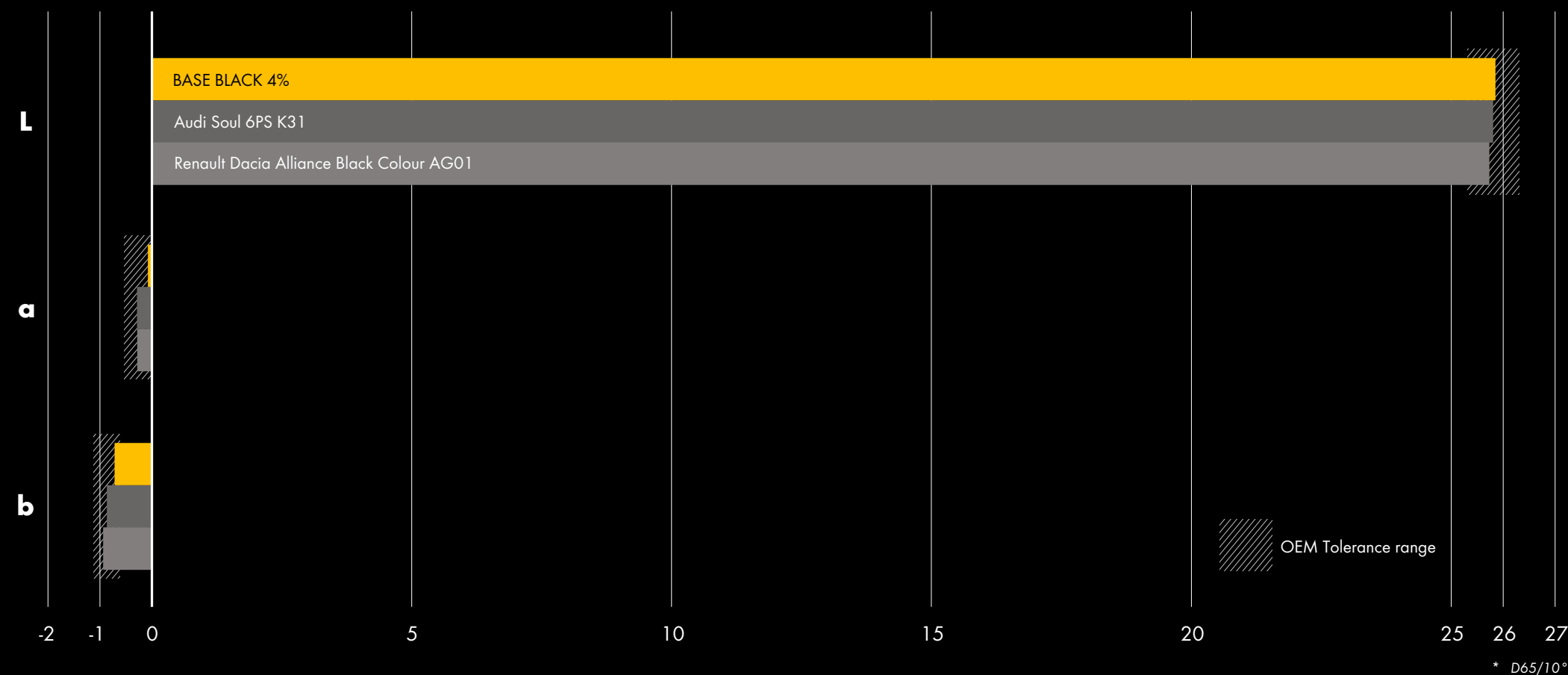
BASE BLACK - MASTERBATCH FOR AUTOMOTIVE APPLICATIONS (PP)

GENERAL INFORMATION

With the BASE BLACK - Masterbatch for polypropylene (PP), GRAFE offers, in addition to its comprehensive portfolio of OEM color formulations, an efficient alternative for the most common automotive black shades. The advantages of the BASE BLACK - Masterbatch are on the one hand the permanent availability, so that sample quantities can be shipped the same day for production testing, and on the other hand the significantly better price level compared to an OEM specified color.

GRAFE's BASE BLACK masterbatch achieves excellent color values even with standard parameters in the production process, which deviate only slightly from the specified colors within the OEM tolerance. We will be glad to support you in the final optimization step to the perfect color, because BASE BLACK from GRAFE can already be adjusted in the production process by minimal parameter shifts (dosage, processing temperature, pressure, etc.).

Tolerance comparison L*a*b* color values



EXAMPLE OF COLOR VALUE & DOSAGE

Audi Soul 6PS K31

Dosage in %	L*	a*	b*
(target value)	25,81	-0,29	-0,87
3	26	-0,11	-0,7
4	25,85	-0,08	-0,72

Renault Dacia Alliance Black Colour AG01

Dosage in %	L*	a*	b*
(target value)	25,74	-0,28	-0,94
2	26,3	-0,18	-0,66
4	25,85	-0,08	-0,72

COLOR VALUES

- BASE BLACK - Masterbatch to OEM color reference (not process optimized)
- Examples in talc filled PP

Color	ΔL^*	Δa^*	Δb^*	Dosage	Angle	
					45°	8°
Audi / VW Soul 6PS K31	0,04	0,21	0,15	4%		X
Daimler Black 9051 K09	-0,06	0,02	0,09	3%	X	
Mistral HZD	-0,7	-0,15	0,31	2%		X
Renault Dacia Alliance Black Colour AG01	0,11	0,21	0,22	4%		X
Tesla Black 110e K09	0,11	-0,1	0,44	2%	X	
Schwarz BMW	-0,11	-0,14	0,41	2%		X

* D65/10°

OEM-REFERENCES

Interior color Masterbatch and Compound formulations are available for the following OEM (excerpt):

AUDI	MERCEDES-BENZ
BENTLEY	OPEL
BMW	PEUGEOT/PSA
FORD	PORSCHE
IVECO	RENAULT
JAGUAR	SEAT
LAMBORGHINI	ŠKODA
LAND ROVER	VOLVO
MAN	VOLKSWAGEN

Other OEM interior colours can be found in our „OEM interior colours“ catalogue on our website, in the GRAFE customer centre or contact us directly for a new formulation.

SERVICE

Grafe Automotive is providing the total package of complete service for you: We support you with our longtime know-how in product development, release process at the OEM as well as during serial production.

COMPETENCES

III OEM-COMPETENCES

- development and production of master plaques for Mercedes-Benz, BMW, Volkswagen, Porsche, Skoda, Bentley, etc.
- projectrelated and supraregional customer and OEM support

III PROFESSIONAL EXPERTISE

- colour masterbatch of all automotive colours
- compounding of all automotive colours
- masterbatches for fibre and textile applications

III COMPETENCE IN COMPOUNDS

- electrically conductive compounds
- color compounds
- technical compounds
- PMMA compounds

III COMPETENCE IN ADDITIVES

- matting agents
- anti-scratch
- flow-improver
- processing aids
- UV- and thermal stabilizers
- permanent antistatics

III COMPETENCE IN POLYMERS

- electric conductive polymers
- polymer development
- blends

III eMobility

- electric conductive polymers
- eOrange



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