

Black is beautiful – now also applies to corrosion protection.

Micro-layer corrosion protection for metric threaded parts
with black surface.



The perfect solution for black surfaces.

Intelligent micro-layer corrosion protection for parts you can see: with the innovative DELTA-PROTEKT® KL 101 + DELTA-PROTEKT® VH 331 GZ.

Everything you expect from high-quality corrosion performance – plus, it looks good.

DELTA-MKS® stands for intelligent micro-layer corrosion protection systems you can rely on. Throughout the world and all of its streets: from the point of view of safety above all, screws and other fastenings are enormously important in the world of automotives, which means that the requirements for surface protection are high. This also applies to black surfaces in the part of the vehicle that you can see. And we know that the eye cannot be fooled. That is why we really dislike black surfaces and coatings which quickly start

to go grey from corrosion:

DELTA®-TONE + DELTA®-SEAL black

This system, established and specified on the market for over 20 years, offers reliable corrosion protection for black surfaces. The product and its application have, of course, constantly been fine-tuned to each other and improved, so that at any time, we can guarantee you the best possible product quality.

DELTA-PROTEKT® KL 101 + DELTA-PROTEKT® VH 331 GZ

In recent years, requirements have risen considerably, firstly with regard to mechanical characteristics, such as temperature resistance, adhesion and abrasion resistance, and secondly, for heat resistance behaviour and screw connection behaviour.

This innovative system does not just offer you something nice to look at, but also more than fulfills the latest requirements. The DELTA-PROTEKT® KL 101 basecoat,

Product fact-file DELTA-PROTEKT® KL 101 + DELTA-PROTEKT® VH 331 GZ

Product description	- System consisting of basecoat and water-based topcoat - no hydrogen embrittlement of high-tensile steels that is associated with the application - corresponds to EU 2000/53/EC heavy-metal free of nickel, cadmium, lead, chromium, mercury, molybdenum
Resistance to white rust formation, DIN 34804	very good
Coefficient of friction, DIN EN ISO 16047*	0,09–0,14 μ_{tot} / OEM-specific friction adaptation available upon request
Loosening under temperature VDA 235-203	> 0,06 μ_{tot}
Curing temperature	200–250 °C
Temperature resistance, 96 h at 180 °C in compliance with VDA 235-104	very good
Colour	black

*depending upon geometry, system set-up and application process

with optimised white rust resistance and adhesion, delivers, even under the toughest conditions the automotive industry can throw at it.

And with our water-based topcoat, DELTA-PROTEKT® VH 331 GZ you can achieve undreamt-of coverage.

So you will see, with our DELTA-MKS® products we do anything that black remains beautiful.

Comparison of resistance to white rust formation in salt spray test *



Competition
after 240 hours salt spray test



DELTA-PROTEKT® KL 101 + DELTA-PROTEKT® VH 331 GZ
after 480 hours salt spray test

*corresponds to ISO 9227, depending upon geometry, system set-up and application process

The details stated in this technical leaflet are based upon our current knowledge and experience. They do not release the user from the testing that is inevitable, given the diversity of possible influences in the processing and application. Liability for specific properties or suitability for any concrete operational purpose may not be assumed from the information provided.

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