

DINITROL 501 FC-HM

Moisture-reactive 1-component polyurethane adhesive

DINITROL 501 FC-HM is used together with the corresponding primer for the replacement of windscreens. When this high-modulus windscreen adhesive is used, the body's torsional rigidity component increases by an additional 30 – 50%. DINITROL 501 FC-HM is low-conductive and contains neither solvents and PVC. The safe drive-away time is 1 hour. This product is suitable for experienced users only.



- » High modulus and low conductive
- » Solvent- and PVC-free
- » Excellent coverage and holding properties
- » Increase in body torsion rigidity by 30 – 50 %
- » Crash-test 1 hour carried out in accordance with FMVSS 212
- » Simple positioning – windscreens do not slip out



Equipment

DINITROL MASTER TOOL
310 ml Cartridge & 600 ml Foilwrap
 Art. No. 1736500

DINITROL MASTER TOOL
310 ml Cartridge & 400 ml Foilwrap
 Art. No. 1736600

INDUSTRIAL NITRILE GLOVES XL 10-P
 Art. No. 1734100

DINITROL 501 FC-HM

Art. No.	Size	Package	Color	Art. No.	Size	Package	Color
12067	310 ml	Cartridge	Black	12126	400 ml	Foilwrap	Black
				12068	600 ml	Foilwrap	Black
				12618	25 kg	Hobbock	Black
Art. No.	Package		Color				
12662	DINITROL 501 FC-HM Set		Black				
	DINITROL 538 PLUS		Black				
	DINITROL 582 Special Cleaner		Black				
	DINITROL Plastic nozzle		Black				
	Instructions		Black				

a brand of



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All data and recommendations are the result of careful tests by our laboratory. They only can be considered as recommendation which corresponds to the level of experience of today. The data are given in good faith. However, in view of the multiplicity of possible application and working methods we are not in a position to assume any responsibility or obligations deriving from the misuse of our products. Therefore, a contractual legal relationship is not justified, and there are no secondary obligations arising from any purchase contracts.

DINITROL 501 FC-HM

Technical Details

Characteristics

DINITROL 501 FC-HM is a humidity-curing and one component polyurethane for the direct-glazing of automotive glasses. The adhesive DINITROL 501 FC-HM includes the following properties:

- good adhesion on paints
- fast curing and high modulus
- low odour
- excellent working characteristics
- very good standing properties
- short cut-off string
- high elasticity
- solvent and PVC free
- OEM approved
- ageing and weather resistant
- Crash test approved acc. FMVSS 212

Together with the corresponding pre-treatments as for example primers and/or activators, DINITROL 501 FC-HM is designed for the use in replacing polyurethane direct-glazed automotive glass parts and other bondings in vehicle manufacturing. The adhesive's high modulus property contributes remarkably to the stiffening increase of the car-body.

Surface pretreatment

The surface to be treated must be clean, dry and free of dust, oil and grease. Thoroughly clean the surface to be bonded (ceramic edge) of the new windshield with DINITROL 582 in order to remove persistent contamination on glass surfaces and the ceramic screen printing. It is recommended to carry out the pre-treatment according to the DINITROL work instructions for glass replacement.

For more information on the use of DINITROL pretreatment products, please refer to our technical data sheets or the DINITROL pretreatment table. Glasses without a ceramic screen print or equivalent protection require an additional UV protective cover.

Application

We recommend to apply the adhesive bead using a sufficiently powerful application gun (e.g. DINITROL Mastertool). For easy processing, use the adhesive at room temperature. For a constant adhesive layer thickness, it is advisable to apply the adhesive in the form of a triangular bead. The glass must be inserted before the skin-formation starts. Warmer temperatures and increasing air humidity shorten or colder temperatures and lower air humidity lengthen the open time. The use of this product is suitable only for experienced users. Pre-tests are recommended for special applications.

Notes on occupational health and safety

Before using DINITROL products, we recommend to the associated safety data sheet (MSDS) for the products. Here, the user can find the information they need for the safe processing, storage and disposal of chemical products and the MSDS contains physical, toxicological and other safety-relevant facts.

The following documents are available on request:

- Material safety data sheet
- DINITROL pre-treatment chart

Technical Details

Chemical base	Polyurethane
Colour/Consistency	black paste
Cure mechanism	humidity-curing
Density (DIN 53217-4)	approx. 1'200 kg/m ³
Non-sag properties	very good
Application temperature	10°C – 35°C (product)
Skin formation time ¹	approx. 20 min.
Open Time ¹	approx. 15 min.
Rate of cure	approx. 3 – 4 mm / 24 h
Shore A hardness (DIN 53505)	approx. 65 – 75
Tensile strength (DIN 53504)	approx. 11 MPa
Elongation at break (DIN 53504)	approx. 400%
Tear strength (DIN 53515)	approx. 11 N/mm
Lab-shear-strength (DIN EN 1465)	approx. 9 MPa
G-modulus (DIN 54451)	approx. 2.5 MPa
Volume resistivity (DIN 60093)	approx. 10 ⁶ Ωcm
Glass transition temperature	approx. -40°C
Temperature resistance	< 80°C short-term (approx. 1 h): < 120°C
Shelf life (FMVSS 212/208) (storages below 0°C - 35°C)	Cartridge/Foilwraps: 12 months Drum/Pail: 6 months
Safe-Drive-Away-Time ¹ (FMVSS 212/208)	without airbag: 1 hour with passenger airbags: 1 hour
Available in	310 ml cartridge, 400 ml & 600 ml foil-wrap,

1) 23°C / 50% r.f



Here you'll find your recommended DINITROL reference adhesive

Use the QR code to access our application video.

For all relevant safety advices please read the material safety data sheet or the packaging label.