

## DINITROL 516 A/B

New 2K System

### Characteristics:

DINITROL 516 A/B is an adhesive system consisting of the moisture curing adhesive DINITROL 516 A (A-Comp.) and the reactive accelerating paste DINITROL 516 B (B-Comp.) with the following properties:

- NO generation of CO<sub>2</sub> blisters
- good adhesion on paints
- less particles
- low odour
- excellent working characteristics
- very good standing properties
- high elasticity
- solvent and PVC free
- OEM approved
- ageing and weather resistant

Together with the corresponding pre-treatments DINITROL 516 A/B is particularly suited to bonding applications in the manufacture of trains, busses and trucks. Because of the excellent working characteristics and the less particles, DINITROL 516 A/B is also suited for very good gap fillings. DINITROL 516 A is a polyurethane based adhesive which will cure also without the accelerating paste but with ambient humidity to an elastic and aging resistant adhesive / sealant with the well known mechanical properties.

To facilitate a curing which will not depend on the ambient humidity and the geometric design of the bonding the reactive accelerating paste DINITROL 516 B was developed.

Both products are adjusted to each other and the curing process will proceed simultaneously all over the bonding area. This is in contrast to one component adhesives where curing is governed by surface depending moisture access and diffusion controlled curing progress. This makes it possible to remove all kinds of fixation devices several hours after the adhesive application and the bonded parts can be transferred to other working procedures.

A particular importance of this 2K system is the fact, that during the curing process of this 2K system, a production or formation of CO<sub>2</sub> is not happen. Due to this characteristics, this 2K adhesive system can be used for bonding and jointing with no formation of blisters.

### Application:

The adhesive system may be applied by an equipment available on the market. DINITROL 516 A is extruded out of pails whereas DINITROL 516 B will be dosed out of pails and/or cartridges. The strictly recommended mixing ratio is 100 to 10 (parts by volume) and must be adjusted at the pump. The mixing is achieved by static mixers with around 18 mixing elements. Application is at room temperature. The to be bonded surfaces must be cleaned and be primed according our recommendations.

The manual operation must be handled with the attendant 2K-gun D 600 or D 400. The A-component is available in foil wraps and the B-paste in PE tubes.

Die in diesem Merkblatt gemachten Angaben sind das Ergebnis sorgfältiger Untersuchungen. Soweit sie sich auf die Anwendung beziehen, sind sie als Empfehlung zu betrachten, die dem Erfahrungsstand entsprechen. Wegen der Vielseitigkeit der Anwendungs- und Arbeitsweisen können wir jedoch eine Verbindlichkeit nicht übernehmen. Es wird daher ein vertragliches Rechtsverhältnis nicht begründet, und es entstehen aus eventuellen Kaufverträgen keine Nebenverpflichtungen.

All data and recommendations are the result of careful tests by our laboratories. They only can be considered as recommendation which correspond 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 use of our products.

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The use of this product is suitable only for experienced users. Pre-tests are recommended for special applications.

*Further information:*

- Safety data sheet
- DINOL pre-treatment chart
- Operation manual for D 600 & D 400

### Storage / Transport:

Store between 0 and 35°C, in closed packaging.

### Available packagings:

2K set is consisting of:

Foil wrap	400 & 600ml	(A-component)
PE-tube	33 & 50 ml	(B-component)
Pail	50 litres	(A-component)
Pail	25 litres	(A-component)
Pail	25 litres	(B-component)
PE cartridge	1 litre	(B-component)

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## DINITROL 516 A/B

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### Technical properties:

<b>DINITROL 516 A</b>	reactive polyurethane
Appearance:	black paste
Density:	1.17 g/cm <sup>3</sup>
<b>DINITROL 516 B</b>	Accelerating paste
Appearance:	white paste
Density:	1.45 g/cm <sup>3</sup> ±0.5
Density, 20°C:	1.22 ± 0.05 g/cm <sup>3</sup>
Mixing ratio (p.b.v.):	100 : 9 bis 100 : 14 516 A : 516 B (V/V)
<b>DINITROL 516A / 516B</b>	
Sag resistance:	very good
Open Time:	25 – 35 minutes
Application temperature:	10°C – 40°C
Shore A hardness (DIN 53505):	approx. 50
Tensile strength (DIN 53504):	approx. 8 MPa
Elongation at break (DIN 53504):	approx. 600%
Tear strength (DIN 53515):	approx. 10 N/mm
Lab-shear-strength (DIN EN 1465):	approx. 6 MPa
G-modulus (DIN 54451):	approx. 1.3 MPa
Volume resistivity (DIN 60093):	approx. 10 <sup>6</sup> Ωcm
Glass transition temperature:	approx. -50°C
Temperature resistant: long-term short term (approx. 1h)	< 90°C < 130°C
Shelf life (storages below 25°C): foil wrap / PE-tube / pails / PE cartridges	12 months

1) 23°C / 50% rf

Health and safety information can be obtained from the material safety data sheet and the product label.

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