DINITROL 517 A/B

2-component polyurethane adhesive for structural bonding

DINITROL 517 A/B is a 2-component high stability polyurethane adhesive suited especially for structural bonding. It has a pot life of approx. 12 minutes. The pot life is easy to change to achieve application times from 5 minutes to 60 minutes.

- » High strength
- » Outstanding structural bonding
- » Curing can be accelerated by the application of heat (from 60 minutes down to 5 minutes)
- » Stable bead directly after application
- » Reduced equipping and process times

Equipment

INDUSTRIE NITRIL-HANDSCHUHE XL 10-P
Art. No. 1734100

DINITROL CARTRIDGE TOOL 2C 20V CORDLESS
Art. No. 1736300

DINITROL 517 A/B

Art. No.	Size	Package	Color
12288	400 ml	Cartridge	White

Component A

Art. No.	Size	Package	Color
12365	50 kg	Hobbock	White

Component B

Art. No.	Size	Package	Color
12366	25 kg	Hobbock	Brown

a brand of DINOL

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DINITROL 517 A/B

Technical Details

Characteristics
DINITROL 517 A/B is a 2-component high stability polyurethane adhesive suited especially for structural gluing. DINITROL 517 A/B has a pot life of approx. 12 minutes. The pot life is easy to change to achieve application times from 5 minutes to 1 hour. Depending on the requirements, the curing can be accelerated by heating.

Features
- 2-component PUR adhesive with high strength
- Excellent structural bonding
- Curing can be accelerated by heating (from 5 up to 60 minutes)
- Directly after application an immediately stable adhesive bead
- Reduce set up and process time

Application
DINITROL 517 A/B may be applied using cartridges or automatic application equipment. Static mixers by the Mixpac company with at least 20 elements or dynamic mixers may be used. DINITROL 517 A/B forms firm beads of adhesive immediately after application.

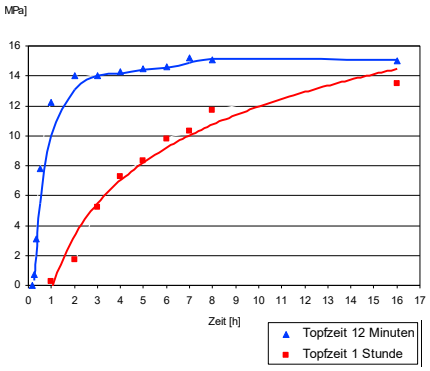
Storage / Transport
The material must be stored in sealed containers away from moisture at temperatures of 5°C to 30°C. We recommend storing the material in application temperatures. The storage life is 12 months from production.

Technical Data

DINITROL 517 A	
Appearance	white
OH value	140 ±10 mg KOH/g
Density, 20°C	1.22 ±0.05 g/cm³
Casson viscosity (23°C) DIN 125	2.5 – 3.0 Pas
DINITROL 517 B	
Appearance	brown
OH value	25 ±1 % weight
Density, 20°C	1.22 ±0.05 g/cm³
Casson viscosity (23°C) DIN 125	0.3 – 0.5 Pa s
Application information	**Mixing ratio A : B**
Volume	2 : 1 parts
Weight	2 : 1 parts
Working temperature	15 – 30°C
Pot life	8 – 15 min.
Material properties of the cured 2C-PUR adhesive	
Tear strength DIN 53504	20 ±1 MPa
Ultimate elongation DIN 53504	45 ±10%
Tear propagation strength DIN 53515	45 ±2 N/mm
G-modulus DIN 54451	
G-modulus 1.75 mm at 10% slip	85 ±3 MPa
G-modulus 1.75 mm at 20% slip	52 ±3 MPa
G-modulus 1.75 mm at 50% slip	27 ±3 MPa
Tensile shear strength DIN 54451	20 ±1 MPa
Ultimate elongation DIN 54451	100 ±5%
Shore A hardness DIN 53505	98 ±2
Shore D hardness DIN 53505	64 ±2
Glass transition temperature ISO 6721-5	≤ -40°C

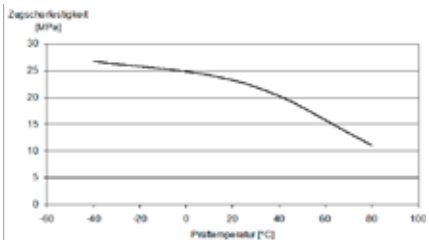
1) 23°C / 50% rf

Strength increase



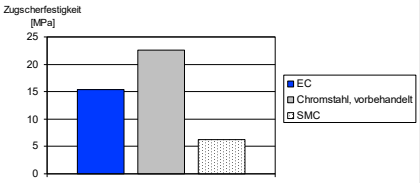
Tensile shear strength as a function of time.
Dimensions of the adhesive surface: 12.5 x 25 x 1 mm
Substrate: EC

Tensile shear strength as a function of practical temperatures



Tensile shear strength as a function of the test temperature:
Dimensions of the adhesive surface: 12.5 x 25 x 0.2 mm
Substrate: X 40 Cr 13 chrome steel, pre-treated

Tensile shear strength of Finitrol 517 A/B glued joints



Tensile shear strength after 7 days storage at 23°C. Test temperature: 23°C.

Images of fractures

EC:	Top EC layer torn off.
X 40 Cr 13 chrome steel:	Primer layer torn from steel.
SMC:	Fracture of substrate, at right angle to tensile force

Comp. A - Hazards identification
2.1. Classification of the substance or mixture
GB CLP Regulation
Skin Sens. 1; H317

Comp. B - Hazards identification
2.1. Classification of the substance or mixture
GB CLP Regulation
Acute Tox. 4; H332; Skin Irrit. 2; H315; Eye Irrit. 2; H319; Resp. Sens. 1; H334; Skin Sens. 1; H317; Carc. 2; H351; STOT SE 3; H335; STOT RE 2; H373

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