

TEROSON EP 1401

July 2014

PRODUCT DESCRIPTION

Technology	Epoxy Resin
Product type	Structural Foam
Additional Information	2-component solvent free

TEROSON EP 1401 is a solvent free, slightly expanding, two component adhesive, based on flexibilised and toughened Epoxy Resins. The material cures at room temperature by reaction of component A and B. By heating up both components the chemical reaction will accelerate. Dependent on the geometry and amount of material, the degree of foam can vary.

APPLICATION AREAS

TEROSON EP 1401 contains hollow microspheres, by which stiffness, strength and fatigue limit is increased. TEROSON EP 1401 is used as reinforcement e.g. for cavities, metal sheets and structural parts. Observe OES instructions.

TECHNICAL DATA

(Typical Test Results)

PART A

Base	Epoxy Resin
Colour	dark grey
Odour	characteristic
Density	approx. 0.8 g/cm ³

PART B

Base	Amine
Colour	white/ light grey
Odour	of amines
Density	approx. 0.6 g/cm ³

Mixing ratio A:B
by volume 2:1

Mixture (PART A+B)

Colour	grey
Odour	no smell after curing
Potlife acc. to Bohlin (oscillating)	
at 20 °C	90 min(s)
at 30 °C	60 min(s)
Density (cured)	approx. 0.7 g/cm ³
Water absorption	
24 hr(s) at 98 % rh and 40 °C	<0.5 % weight gain
Compressive strength	15 to 20 MPa
E-Modulus	700 MPa
Poisson ratio	0.22 to 0.26
Volume change	
(dependent on the curing conditions/ volume / geometry)	0 to 30 %
In service temperature	-40 to 90 °C

PRELIMINARY STATEMENT

Prior to application it is necessary to read the **Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed.

PRETREATMENT

The surfaces must be dry and free of oil, grease and dust. For pretreatment of the application area / surface use TEROSON VR 10 / VR 20.

APPLICATION

TEROSON EP 1401 is processed from universal cartridges with manual application tools (guns driven by hand, air pressure or battery). Only use cartridge pistols that are equipped with a piston rod. Prior to screwing the static mixer, a small amount of the material should be pressed out to ensure that both components are passed on simultaneously. To ensure proper mixing, discard the first approx. 10 cm of the adhesive bead. If material is left in the cartridge leave the static mixer attached. For further use of the product, simply remove the mixer and install a new one.

CURING

TEROSON EP 1401 cures without additional exterior heat only by chemical reaction after mixing component A and B at room temperature. The curing time depends on the material temperature, which is influenced by room temperature and reaction heat. The more TEROSON EP 1401 is applied, the higher is the reaction heat. For accelerated curing it is recommended to use a heat source (convection oven, infra-red or similar).

CLEANING

Cured adhesive can only be removed mechanically. Fresh, uncured material can be removed with TEROSON VR 20.

STORAGE

Frost sensitive	conditionally
Recommended storage temperature	15 to 25 °C
Shelf life	12 months in original packaging

Disclaimer

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Note:

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