

TEROSON PU U333/U102

June 2020

PRODUCT DESCRIPTION

Technology	Polyurethane
Product Type	2-Component-system
Application	Potting
Curing	Room temperature or with heat

TEROSON PU U333/U102 is a two part polyurethane adhesive with low density and low viscosity.

Application Areas:

TEROSON PU U333/U102 is a potting material adapted for encapsulation of electronic components for protection against mechanical stress and environmental attacks.

This soft, solvent-free material has an excellent heat and humidity resistance in combination with good adhesion on many plastic materials and metals.

TECHNICAL DATA

(Typical Test Results)

TEROSON PU U333

COMPONENT A (Polyol resin)

Appearance	liquid
Colour	black
Solid content	100 %
Density	0.95 g/cm ³
Viscosity (Brookfield RVT, spindle 3, 20 rpm, 23°C)	approx. 1,600 mPas

TEROSON PU U102

COMPONENT B (Isocyanate hardener)

Appearance	liquid
Colour	black
Solid Content	100 %
Density	1.05 g/cm ³
Viscosity (Brookfield, spindle 1, 10 rpm, 23°C)	approx. 100 mPas

Typical data of mixed material

TEROSON PU U333 **TEROSON PU U102)**

Mixing ratio A : B	
by weight	100:50
by volume	100:45
Color of mixed product	black
Pot life (gel timer @ 23°C)	3 to 5 min

Typical properties of **cured material**

Tensile strength	approx. 1.8 MPa
Elongation at break	approx. 120%

Hardness, Shore A	approx. 35
Tg (glass transition temperature)	<-50°C
Water absorption (30 d @ 23°C)	<0.25%
Shrinkage	<0.22%
In service temperature	-40 to +120 °C

Electrical and **dielectrical properties**

Volume resistivity (0.5 cm @ 25°C)	4.8 * 10 ¹⁵ Ohms*cm
Dielectric strength (0.7 mm @ 25°C)	18.3 kV/mm (tbc)
Linear Thermal Expansion Coeff. (-40 - 130°C)	8.95 * 10 ⁻⁵ mm/mm*K

PRELIMINARY STATEMENT

Prior to use 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.

DIRECTIONS OF USE

Method of use:

TEROSON PU U333/U102 must be continuously stirred at low speed during the application.

The application and mixing can be done at room temperature or at elevated temperature (max. 40°C).

Dynamic mixing is recommended, air incorporation and moisture is to avoid.

Higher temperatures accelerate, lower temperatures slow down the curing speed.

Cleaning:

Freshly applied and uncured material should be removed with a dry cloth and then cleaned off with a suitable solvent (e.g. LOCTITE SF 8040).

Cured material should be removed mechanically, remaining material can be treated with TECHNOMELT CLEANER MELT-O-CLEAN.

STORAGE

TEROSON PU U333

Frost sensitive	yes
Recommended storage temperature	5 to 35 °C
Shelf life	9 months in original packaging

TEROSON PU U102

Frost sensitive	yes
Recommended storage temperature	5 to 35°C
Shelf life	8 months in original packaging

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Reference 1.1