

TEROSON PU U642/U154

May 2019

PRODUCT DESCRIPTION

Technology	Polyurethane, 2-Component
Product Type	semi structural adhesive
Additional Information	low fogging adhesive

TEROSON PU U642/U154 is a polyurethane based two-component adhesive which cures at room temperature. For accelerated curing it is recommended to use a heat source.

Application Areas:

TEROSON PU U642/U154 is used in the automotive industry by headlight manufacturers for bonding lens to body. For any other substrate please ask our technical advice.

TEROSON PU U642/U154 is designed for headlight applications with high demand for low fogging temperature (up to 130°C).

TECHNICAL DATA

(Typical Test Results)

TEROSON PU U642

(Comp. A / Polyol)

Colour	black
Density	approx. 1.63 g/cm ³
Solids	>99 %
Viscosity Brookfield RVT	approx. 150,000 mPa.s
Test conditions	Spindle 7; 20 rpm; 23°C

TEROSON PU U154

(Comp. B / Hardener)

Colour	grey
Density	approx. 1.36 g/cm ³
Solids	>99 %
Viscosity Brookfield RVT	approx. 25,000 mPa.s
Test conditions	Spindle 6; 10 rpm; 23°C

Mixing ratio A : B

by weight	100 : 18
by volume	100 : 21.6

MIXTURE (Component A + B)

Potlife (60 g, 23°C)	approx. 3 min
Shear strength, 23°C after 7 d curing	approx. 2 MPa (1.5 mm adhesive thickness)

DIRECTIONS OF USE

Preliminary Statement:

Prior to use it is necessary to read the **Material 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 parts to be bonded must be free from oil, grease, moisture, dirt and release agents. From the Henkel portfolio for example TEROSON PU 8550 or TEROSON VR 20 can be used as cleaners. In the case of plastics a surface pre-treatment like plasma or flame can be necessary to ensure good adhesion of TEROSON PU U642/U154 to the substrate. Occasionally usage of a primer is also an option.

Application:

Apply using a meter mix pump.
 Product is temperature sensitive with a short pot life.
 Use only static mix head.
 Extrude a bead on one of the substrates to be bonded.
 Position rapidly second substrate and apply a light pressure for several minutes.
 Do not mix with other products.
 Purge and rinse mix head regularly to avoid fouling.
 To ensure proper mixing, static mixers with at least 24 mixing elements are required.
 For any other applying condition, please ask for our technical advice.

Curing:

Curing occurs at room temperature. At the beginning curing should occur under fixation of the substrates to avoid shifting of the parts to be bonded (especially in the case of tension between the join partners). The rate of cure is temperature-dependent and influences open time and time to handling strength. Higher temperatures accelerate, lower temperatures slow down the curing speed. For accelerated curing it is recommended to increase the temperature up to 60 to 70 °C. Final strength is widely reached after 3 days at room temperature.

Cleaning:

Freshly applied and uncured material should be removed with a dry cloth or using a solvent as TEROSON VR 40 or MEK.

Cured adhesive can only be removed mechanically.

CLASSIFICATION

Please refer to the corresponding **Material Safety Data Sheets** for details on:

- Hazards identification**
- Transport information**
- Regulatory information**

STORAGE**TEROSON PU U154**

Frost sensitive	yes
Recommended storage temperature	5 to 25 °C
Shelf life	6 months

A sufficient agitation is always recommended just before use to eliminate any possible phase separation on top of the product. For the agitation we recommend to place the full closed pail during 5 minutes in a gyroscopic mixer or in a portable drum roller. After homogenization the most appropriate is to use the product within 48 hours.

* or 5°C to 35°C if a "bi-axial gyroscopic" agitation is made just before use.

TEROSON PU U642

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

Avoid moisture.

Ensure a good rotation of stocks by using oldest material first.

Disclaimer

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Reference 1