

LOCTITE[®] UK 2073 / LOCTITE[®] UK 2173

November 2023

PRODUCT DESCRIPTION

LOCTITE[®] UK 2073 / LOCTITE[®] UK 2173 provides the following product characteristics:

Technology	Polyurethane, 2-component
Mixing Ratio	2 : 1 by volume
Application	Bonding of plastic and multi-material components
Specific Benefit	Specifically suitable for low surface energy plastics

LOCTITE[®] UK 2073 / LOCTITE[®] UK 2173 is a solvent free, elastic, 2-component adhesive/sealant based on Polyurethane which is designed for fast cohesion build-up and long open time.

LOCTITE[®] UK 2073 / LOCTITE[®] UK 2173 cures at room temperature.

LOCTITE[®] UK 2073 / LOCTITE[®] UK 2173 has excellent adhesion to various substrates like different kinds of plastics and specifically low surface energy types such as PP Talc, PP LGF, PC/ABS, PC/PET, etc. The product enables lightweight designs by joining different plastic qualities.

Application Areas:

LOCTITE[®] UK 2073 / LOCTITE[®] UK 2173 is primarily designed for elastic bonding of automotive plastic parts like spoilers, tailgates, roof system, bumpers, luggage racks, dashboards and trim parts.

TECHNICAL DATA

COMPONENT A (Polyol)

Colour	black
Density, g/cm ³	1.35
Solids content, %	>99
Viscosity, Pa*s (Rheometer PP25, 23°C)	60 to 100

COMPONENT B (Isocyanate)

Colour	grey
Density, g/cm ³	1.38
Solids content, %	>99
Viscosity, Pa*s (Rheometer PP25, 23°C)	30 to 100

Mixing Ratio A : B

by volume	2 : 1
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MIXTURE (Component A + B)

Open time (40°C), min	3 to 4
Tensile shear strength, MPa (after 3 d at 23 °C)	>2.5
Layer thickness	1.5
Bonding area, mm	25 x 12.5
Substrate	PP Talc, PP LGF, PC/ABS and e-coated steel
Elongation at break, %	300
Tensile strength, MPa	3.5 to 4.5
Shore A	60 to 70

DIRECTIONS FOR USE

Preliminary Statement:

Prior to application 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 labelling, the relevant precautions should always be observed.

Surface Treatment and Priming:

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. When using solvents, flash off time of at least 5 minutes is mandatory. In case of plastics a pre-treatment like flaming, plasma or corona can be necessary to ensure good adhesion of LOCTITE[®] UK 2073 / LOCTITE[®] UK 2173 to the substrate. The use of a primer like TEROSON PU 8527 GM is also an option.

Application:

Prior to use, LOCTITE[®] UK 2073 / LOCTITE[®] UK 2173 is mixed in a suitable 2-part dosing and mixing equipment. Apply using a meter mix pump. Product is temperature sensitive with a short potlife. 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. Ideal mixing Ratio depends on application and should be consulted with a Henkel Application Engineer.

Curing:

After mixing of the component A and the component B, the curing process starts. The curing process is independent of the relative humidity. Curing occurs at room temperature. 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, like 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:

Frost sensitive	no
Recommended storage temperature, °C	5 to 35
Shelf life, months	12

Avoid moisture.

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

Conversion:

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\mu\text{m} / 25.4 = \text{mil}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

ADDITIONAL INFORMATION

Disclaimer

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