



LOCTITE UK 8103VN 25KG

**Solvent-free
Two-component Adhesive**

Base: Polyurethane

Product Description

Characteristic : LOCTITE UK 8103VN / UK 5400 is a solvent-free, long pot life, two-component adhesive based on Polyurethane. The resin (A) consists of organic compounds with hydroxyl groups whereas the hardener (B) is based on Isocyanate. By mixing both components in a weight of 5:1, a hard elastic product is formed by chemical reaction. After curing the product exhibits no measurable change in volume, water proof & resist to oil & petroleum.

Application Area

LOCTITE UK 8103VN / UK 5400 is long open time adhesive for the panel and door manufacture. Panel and door that have sandwich construction of steel board and paper honeycomb Bonding for composite plates consist of various foam boards (polystyrene and polyurethane, etc.), wood, plastic, and flexible board, etc.

Technical Data

	Component A UK 8103VN	Component B Hardener UK 5400	Method
Color:	Grey	brown	Visual observation
Consistency:	liquid	thin liquid	
Density:	ca. 1.69 g/cm ³ (20°C, Density cup)	1.20 - 1.24 g/cm ³ (Hydrometer)	
Viscosity:	approx. 25,000 mPa.s (# 6/20 rpm)	200±50 mPa.s (#2/20 rpm)	Brookfield, RVT, 20°C
Mixing ratio by weight:	5	:	1

Mixture (Component A + B)

Consistency:	Paste
Pot life:	ca. 100 minutes
Open time (20°C):	ca. 200 minutes
Initial Setting Time:	ca. 8 hours at 20°C
Appearance:	Glossy grey solid
Hardness:	90 minimum (Shore A, after mixing) 7 days
Consumption:	200-400g/cm ² (depending on substrates concerned)
Application temperature:	5-35°C

Preliminary remarks

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

Pretreatment of the surface to be bonded

The substrate should be dry, free of dust, oil, grease and other contaminants. Metals are to be wash-coated with a suitable primer, especially if subsequent exposure of the adhesive to moisture is expected. Release agents must be cleaned off the surfaces of plastic sheets. Improved adherence is attained if the surface is roughened prior to application. Nonetheless, even coating with primer and washing up with solvents (Isopropanol, Ethanol or Acetone) are suitable as pretreatment; polystyrene parts without pretreatment cannot be bonded with LOCTITE UK 8103VN

Processing : Resin and Hardener are supplied separately and must be mixed just prior to use. The resin/hardener mixture is workable only for a limited time (pot life). It is recommended to mix with 2 components glue dispenser.

Application

1. Remix the resin part before using with clean & dry equipment
2. Mixing resin and hardener according to the recommended mixing ratio.
3. The mixture is workable only within a limited time (pot life) by applying only on the substrate surface and one of sandwich bonding.
4. To accelerate the curing time to 5-10 minutes, it could be done by increasing temperature up to 60°C.

Curing LOCTITE UK 8103VN can be cured cold (at room temperature above 15°C) or warm. The curing duration will be substantially reduced by increasing the temperature. The ultimate adhesive strength is achieved after several days. During the curing time it should be ensured that there is adequate contact pressure (load pile, presses, clamps), so that the parts to be bonded are held in contact with the adhesive over the complete surface area.

Cleaning Fresh, uncured material (Cleaning of application equipment spills on substrate etc.) can be removed with the cleaner Macroplast B 8040; cured casting resin can be removed only mechanically.

Caution LOCTITE UK 8103VN reacts to varying degrees with water. One by-product of this reaction is carbon dioxide gas. If too much water is present, enough gas can be generated to produce expanded foam which may effect adhesive performance. Consequently, it is important that moisture be kept to a minimum before and during part processing. Once the resin and hardener have reacted together the potential for foaming is eliminated.

Storage : Keep indoor and dry place in sealed containers and dry conditions. Higher temperature will lead to faster sedimentation.

Handling Suggestions: To avoid accidental contamination, re-close the container tightly as soon as sufficient adhesive has been portioned out for immediate use.

**Hazard Indications/
Safety Recommendations/
Transport Regulations** See Safety Data Sheet

Important

The above data, particularly the recommendations for application and use of our products are based on our knowledge and experience. Due to different materials and conditions of application which are beyond our knowledge and control we recommend strongly to carry out sufficient tests in order to ensure that our products are suitable for the intended processes and applications. Except for willful acts any liability based on such recommendations or any oral advice is hereby expressly excluded.

This Technical Data Sheet supersedes all previous editions.

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