

LOCTITE[®] SF 7951[™]

 Known as LOCTITE[®] 7951[™]

January 2015

PRODUCT DESCRIPTION

LOCTITE[®] SF 7951[™] provides the following product characteristics:

Technology	Primer - Cyanoacrylate
Chemical Type	Amine (active ingredient)
Appearance	Slightly hazy, colorless thin liquid ^{LMS}
Solvent	Perfluorocarbon and Chlorobenzotrifluoride
Active Ingredient Concentration, %	0.25 to 0.4
Viscosity	Very low
Cure	Not applicable
Application	CA surface primer

LOCTITE[®] SF 7951[™] is used to make polyolefin and other low energy surfaces suitable for bonding with Loctite cyanoacrylate adhesives. On such treated surfaces the cured performance of LOCTITE[®] cyanoacrylate adhesives is generally similar to that described in the TDS for the relevant adhesive. LOCTITE[®] SF 7951[™] is only recommended for difficult to bond substrates which include polyethylene, polypropylene, polytetrafluoroethylene (PTFE) and thermoplastic rubber materials. LOCTITE[®] SF 7951[™] Polyolefin Primer is not recommended in assemblies where high peel strength is required. The product is non-flammable.

TYPICAL PROPERTIES

Specific Gravity @ 25 °C	1.54
Viscosity @ 25°C, mPa·s (cP)	0.7
Drying Time @ 25 °C, seconds	20 to 40
On Part Life, hours	≤8
Infrared Spectroscopy	To match standard ^{LMS}
Flash Point - See SDS	

TYPICAL PERFORMANCE

Fixture time and cure speed achieved as a result of using LOCTITE[®] SF 7951[™] depend on the adhesive used and the substrate bonded.

TYPICAL PERFORMANCE

Adhesive Properties

After 24 hours @ 22 °C

Block Shear Strength, ISO 13445:	
Polypropylene and LOCTITE [®] 401 [™]	N/mm ² 11.5 (psi) (1,670)
Polypropylene and LOCTITE [®] 406 [™]	N/mm ² 9 (psi) (1,305)
Polypropylene and LOCTITE [®] 414 [™]	N/mm ² 17 (psi) (2,465)

LDPE and LOCTITE [®] 414 [™]	N/mm ² 6 (psi) (870)
HDPE and LOCTITE [®] 414 [™]	N/mm ² 15.5 (psi) (2,250)
Thermoplastic Rubber and LOCTITE [®] 414 [™]	N/mm ² 11 (psi) (1,595)
Polypropylene and LOCTITE [®] 416 [™]	N/mm ² 10 (psi) (1,450)

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected with a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Safety Data Sheet (SDS).

Under no circumstances should primer and adhesive be mixed directly as liquids. Use only in a well ventilated area. This product is intended for post-activation.

Where aqueous washing systems are used to clean the surfaces before bonding, it is important to check for compatibility of the washing solution with the adhesive. In some cases these aqueous washes can affect the cure and performance of the adhesive.

Handling precautions

The solvent can affect certain plastics or coatings. It is recommended to check all surfaces for compatibility before use.

Directions for use:

1. Primer may be applied by spraying, brushing or dipping at ambient temperature.
2. Only one coat of primer is recommended.
3. Allow primer to dry before application of adhesive.
4. If polyolefin and more active or easier to bond materials are involved, apply the primer to the polyolefin only.

Loctite Material Specification^{LMS}

LMS dated June 21, 1996. Test reports for each batch are available for the indicated properties. LMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Quality.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Conversions

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

Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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Reference 1.2