

PRODUCT DESCRIPTION

LOCTITE® 3D Smooth Coat provides the following product characteristics:

Technology	Acrylic
Appearance	Beige color
Chemical Type	Acrylate
Viscosity	Medium
Cure	Solvent evaporation
Application	Coating
Key Substrates	3D Printed plastics and metals
Specific Benefits	<ul style="list-style-type: none"> • Fast drying • Surface filling • Easy sprayable

LOCTITE® 3D Smooth Coat is a one-component sprayable acrylate high builder surface coating with excellent adhesion and filling properties on various 3D printed plastic and metal surfaces. The product smoothens surfaces, covers defects, scratches and polishing marks. LOCTITE® 3D Smooth Coat is designed to cover 50 µm to 120 µm structures arising from the SLS, FFF and MJF printing process. With one pass the product smoothens by leaving a tough film on the surface. The dried surface can be sanded and painted. LOCTITE® 3D Smooth Coat is compatible with a wide range of different paints. Surface areas between 1-2 m² can be coated with LOCTITE® 3D Smooth Coat.

TYPICAL CURING PERFORMANCE

The fully dried material remains flexible.

Cure Speed

The rate of drying will depend on the ambient temperature and, on the type of substrate. Tack free time at 22 °C / 50 % relative humidity is approximately 10 minutes. Additional layers of LOCTITE® 3D Smooth Coat can be applied after 3-5 minutes. LOCTITE® 3D Smooth Coat is sandable after 30 minutes. Overpaintable with various paints after 15 minutes.

GENERAL INFORMATION

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

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

Directions for use:

Surface Preparation

Proper surface preparation is critical to the long-term performance of the coating. The surface preparation process may vary depending on with the printing technology used.

1. The surface should be clean, dry and free of powder or uncured resin.
2. Shake the spray can at room temperature rigorously for minimum 3 minutes. Ensure the movement of the mixer ball inside the spray can.
3. Apply the coating by spraying the material from a distance of approximately 30 cm (1 ft).
4. Allow 3-5 minutes for the solvent to flash-off before applying additional LOCTITE® 3D Smooth Coat if needed.
5. Wait minimum 15 minutes before overpainting or 30 minutes before sanding the coated part.
6. To avoid nozzle clogging after use, turn the aerosol spray can upside down and spray until nozzle is free.

Storage

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

Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 21 °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.

Loctite Material Specification^{LMS}

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.

Conversions

- (°C x 1.8) + 32 = °F
- kV/mm x 25.4 = V/mil
- mm / 25.4 = inches
- µm / 25.4 = mil
- N x 0.225 = lb
- N/mm x 5.71 = lb/in
- N/mm² x 145 = psi
- MPa x 145 = psi
- N·m x 8.851 = lb·in
- N·m x 0.738 = lb·ft
- N·mm x 0.142 = oz·in
- mPa·s = 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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