Preliminary Technical Data Sheet

LOCTITE 3D CLEANER C

February 2020

PRODUCT DESCRIPTION

LOCTITE® 3D Cleaner C provides the following product characteristics:

Technology	Solvent cleaner
Chemical Type	Glycol ether blend
Appearance	Clear liquid
Viscosity	Low
Application	Cleaning and resin removal of SLA/DLP printed parts
Specific Benefits	• Effectively removes 3D printing resins • Water rinseable • Non-flammable at room temperature • No damage to 'green' part or cured resins when used as recommended

LOCTITE® 3D Cleaner C is used for cleaning of SLA/DLP printed parts prior to post curing. This cleaner which is non-flammable at room temperature removes residual uncured resin and other surface contaminations. LOCTITE® 3D Cleaner C is non-harmful and can be heated up to 50 °C (122 °F) to increase cleaning efficiency. This cleaner is suitable for industrial part washing and cleaning equipment, no ATEX or NEC certification required. LOCTITE® 3D Cleaner C suitable to use with LOCTITE ® 3D Printing EQ DW11 Dual Wash station.

TYPICAL PROPERTIES

Specific Gravity @ 25 °C	0.95
Flash Point, °C (°F)	75 (167)
Boiling Point, °C (°F)	190 (374)
Calculated vapor pressure @ 20 °C, mm Hg	0.25
Viscosity @ 20 °C, mPa·s (cP)	14

TYPICAL CLEANING PROPERTIES

LOCTITE® 3D Cleaner C removes DLP/SLA resins from printed 'green' parts prior to the post curing. The time required for cleaning depends on the type of resin, the temperature, the agitation and the complexity of the part. Treatment of parts with LOCTITE® 3D Cleaner C requires a water rinsing step.

LOCTITE® 3D Cleaner C typically needs to be replaced at a resin loading between 10-20 %, visually noticeable by reduced cleaning performance.

MATERIAL COMPATIBILITY

LOCTITE® 3D Cleaner C was tested on different SLA/DLP acrylate resins and is particularly compatible with LOCTITE ® 3D 3820, 3830, 3840, 3870, 3172, 3818, 3843, 8195 resins.

LOCTITE® 3D Cleaner C is not recommended for silicone-based materials such as LOCTITE 3D 5015 and 5010.

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).

General direction of use:

LOCTITE® 3D Cleaner C should not be heated above 50 °C (122 °F). Extensive soaking of parts in LOCTITE® 3D Cleaner C can influence the final properties of the part. The cleaning performance of LOCTITE® 3D Printing Cleaner C will decrease due to resin saturation over time. High shear agitation using ultrasound, turbulent mixing or other appropriate device can influence the cleaning performance. High energy cleaning can influence final part quality. **LOCTITE® 3D Cleaner C is not designed of distillation or recycled.**

1. Remove any excess of uncured resin from the surface of the part by drip-drying or solvent-soaked cleaning wipes before starting the cleaning process using LOCTITE® 3D Cleaner C.
2. Immerse the part in an agitated bath of LOCTITE® 3D Printing Cleaner C for a maximum of 10 minutes. Typical cleaning time is recommended between 5 to 7.5 minutes. Some require cleaning below 5 minutes.
3. Rinse with DI water for additional 5 to 10 minutes.
4. Water can be blown off with pressured air or parts can be dried at ambient temperature. For accelerated drying heat the part for approximately 10 minutes at 60 °C (140 °F).

Specific additional direction of use with LOCTITE ® 3D Printing EQ DW11 Dual Wash

1. Set the cleaning cycle for the tank filled with LOCTITE® 3D Cleaner C to 7.5 minutes. Parts printed with some resins can be affected below 5 minutes and should only be cleaned for 2 to 3 minutes.
2. If cleaning results in the damage of printed surface parts, cleaning time should be reduced. For insufficient cleaning, increase individual cleaning time to a maximum of 10 minutes or repeat the cleaning cycle.
3. Limit the changeovers of the propeller to 2 to 3 over the total cleaning cycle.

4. 11 L of LOCTITE® 3D Printing Cleaner C can approximately hold 1 to 1.5 L of uncured resin before the cleaner needs to be replaced. The cleaner pot life timer should be set accordingly.
5. Agitation speed should be set to 'Mid' for initial orientation. Increase or decrease agitation speed if agitation is too slow or too strong.
6. For more details on the equipment, refer to the product description sheet of manual of LOCTITE ® 3D Printing EQ DW11 Dual Wash

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

Optimal Storage: -20 °C to 50 °C. Storage below -20 °C or greater than 50 °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 SpecificationLMS
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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