

LOCTITE® 128157™

April 2008

PRODUCT DESCRIPTION

LOCTITE® 128157™ provides the following product characteristics:

Technology	Acrylic
Chemical Type	Dimethacrylate ester
Appearance (uncured)	Green liquid ^{LMS}
Components	One component - requires no mixing
Viscosity	Very low
Cure	Anaerobic & UV cure
Application	Threadlocking
Strength	High

LOCTITE® 128157™ is a single component, wicking grade, anaerobic adhesive that has high prevail strength. It cures rapidly between metal surfaces when air is excluded. Narrow beads of this product can be solidified, even in contact with air, by exposure to high intensity, short wavelength UV light. The product prevents loosening through vibration and leakage of threaded fasteners.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	1.08
Flash Point - See SDS	
Viscosity, falling ball 'A', 25°C, mPa·s (cP)	9 to 17 ^{LMS}

TYPICAL CURING PERFORMANCE

This product is cured when exposed to UV radiation of 365nm. To obtain a full cure on surfaces exposed to air, radiation at 250 nm is also required. The speed of the cure will depend on the UV intensity as measured at the product surface. Typical cure condition is at 100mW/cm² using a medium pressure, quartz envelope, and mercury vapour UV lamp.

Surface Cure

Tack Free Time is the time required to achieve a tack free surface

Tack Free Time, ASTM C679, seconds:	
Medium Pressure Hg Arc light source:	
100 mW/cm ² , measured @ 365 nm, 0.1 mm film	30 to 70 ^{LMS}

TYPICAL PERFORMANCE OF CURED MATERIAL**Adhesive Properties**

After 24 hours @ 22 °C

Compressive Shear Strength, ISO 10123:	
Steel pins and collars	N/mm ² ≥7.0 ^{LMS} (psi) (≥1,015)

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 Safety Data Sheet (SDS).

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.

This product is not normally recommended for use on plastics (particularly thermoplastic materials where stress cracking of the plastic could result). Users are recommended to confirm compatibility of the product with such substrates.

Directions for use:

1. For best performance bond surfaces should be clean and free from grease.
2. Product is normally pre-applied to the bolt in sufficient quantity to fill all engaged threads. Very large thread sizes may create gaps which will affect performance.
3. This product performs best in thin bond gaps (0.05 mm).
4. This product is designed to give controlled friction, (torque/tension ratio), during assembly. In critical tightening applications this ratio should be confirmed.

Loctite Material Specification^{LMS}

LMS dated September 20, 1999. 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

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

Reference 0.2

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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