



LOCTITE[®] 7070™

May 2005

PRODUCT DESCRIPTION

LOCTITE[®] 7070™ provides the following product characteristics:

Technology	Solvent cleaner
Chemical Type	Hydrocarbon / Monoterpene blend
Appearance	Colorless transparent liquid ^{LMS}
Viscosity	Very low
Cure	Not applicable
Application	Surface cleaner

LOCTITE[®] 7070™ is a non-aqueous, hydrocarbon based, non-CFC solvent designed for cleaning and degreasing of surfaces to be bonded with Loctite[®] adhesives. The product is used as a final pre-assembly cleaning treatment to remove most greases, oils, lubrication fluids, metal cuttings and fines from all surfaces to be bonded. It is designed to be used as a spray or in immersion cleaning processes at room temperature or heated.

TYPICAL PROPERTIES

Specific Gravity @ 25 °C	0.75
Infrared Spectrum	As standard ^{LMS}
Viscosity @ 20°C, mPa·s (cP)	1 to 2
Drying Time at 20 °C, minutes	5 to 20
Kauri-Butanol Value (KB)	31
Flash Point - See MSDS	

TYPICAL PERFORMANCE

LOCTITE[®] 7070™ has no effect on the speed of cure or final strength of Loctite[®] adhesives other than providing a clean surface for good adhesion and adhesive cure. Unclean or partially cleaned surfaces can affect adhesive performance.

HANDLING PRECAUTIONS

Cleaner must be handled in a manner applicable to highly flammable materials and in compliance with relevant local regulations.

Special care must be taken to avoid contact of the product or its vapour with naked flame or any electrical equipment that is not flame proofed.

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

LOCTITE[®] 7070™ is compatible with metals, many plastics and elastomers.

The following table shows the effect of LOCTITE[®] 7070™ on various plastics and elastomers. Since compatibility is affected by material variation, it is recommended to check parts and cleaning equipment gaskets, seals and O-rings under end use conditions before adopting use of LOCTITE[®] 7070™.

LOCTITE[®] 7070™ Compatibility with Plastics

Tested per ASTM D543 - 87

(All specimens weighed 30 minutes after removing from solvent)

Plastics	30 minutes @ 22 °C:	
	% Wt chg	Appearance
ABS	+0.05	No change
Acrylic	+0.11	No change
Polyacetal	+0.02	No change
G-10 Epoxy	+0.01	No change
Nylon 101	+0.14	No change
Nylon 66	+0.04	No change
Polycarbonate	+0.07	No change
Phenolic	+0.21	No change
Polyethylene (HD)	+0.05	No change
Polyethylene (LD)	+0.11	No change
Polypropylene	+0.06	No change
Polystyrene (High Impact)	+0.13	No change
Polystyrene	+0.13	No change
Polysulfone	+0.05	No change
PVC	+0.03	No change
Polytetrafluoroethylene	+0.02	No change
Polyetherimide	+0.09	No change
Polybutyleneterephthalate	+0.05	No change

Plastics	30 minutes @ 38 °C:	
	% Wt chg	Appearance
ABS	0	No change
Acrylic	+0.04	No change
Polyacetal	+0.01	No change
G-10 Epoxy	+0.01	No change
Nylon 101	+0.05	No change
Nylon 66	+0.02	No change
Polycarbonate	+0.03	No change
Phenolic	0.13	No change
Polyethylene (HD)	+0.1	No change
Polyethylene (LD)	0.39	No change
Polypropylene	+0.1	No change
Polystyrene (High Impact)	+0.28	No change
Polystyrene	+0.03	No change
Polysulfone	+0.03	No change
PVC	+0.03	No change
Polytetrafluoroethylene	+0.01	No change
Polyetherimide	+2.7	No change
Polybutyleneterephthalate	+0.04	No change

LOCTITE® 7070™ Compatibility with Elastomers

Tested per ASTM D543 - 87

(All specimens weighed 30 minutes after removing from solvent)

Plastics	30 minutes @ 22 °C:	
	% Wt chg	Appearance
Buna-N	+0.9	Slight swelling
Buna-S	+0.48	Slight swelling
Butyl	+5.33	Swelling
EPDM	+5.23	Swelling
Neoprene	+1.08	Slight swelling
Polyurethane	+0.07	Slight swelling
Silicone	+10.8	Swelling
Fluoroelastomer	+1.08	Slight swelling

Plastics	30 minutes @ 38 °C:	
	% Wt chg	Appearance
Buna-N	+2.5	Swelling
Buna-S	+1.1	Slight swelling
Butyl	+8.2	Swelling
EPDM	+12.0	Swelling
Neoprene	+2.3	Swelling
Polyurethane	+0.07	Slight swelling
Silicone	+13.8	Swelling
Fluoroelastomer	0	Slight swelling

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 Material Safety Data Sheet (MSDS).

Directions for use

1. Treat surfaces to be cleaned by spraying or wiping surfaces with a solvent soaked paper towel.
2. Wipe surfaces when still wet with clean paper towel to ensure contaminants and excess solvent are removed.
3. Repeat cleaning process if necessary.
4. Allow the solvent time to evaporate until the surfaces are completely dry.
5. Apply the Loctite® adhesive immediately and assemble bond.

Loctite Material Specification^{LMS}

LMS dated March 23, 2005. 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

The product is classified as flammable and must be stored in an appropriate manner in compliance with relevant regulations. Do not store near oxidizing agents or combustible materials. Store product in the unopened container in a dry location. Storage information may also be indicated on the product container labelling

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 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

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

Note

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Reference 1.0