



LOCTITE® 7091™

July 2005

PRODUCT DESCRIPTION

LOCTITE® 7091™ provides the following product characteristics:

Technology	Primer for LOCTITE® anaerobic adhesives and sealants
Chemical Type	Organocopper compound
Solvent	Reactive methacrylate monomer
Appearance	Blue liquid ^{LMS}
Viscosity	Low
Cure	Copolymerization
Application	Anaerobic surface primer

LOCTITE® 7091™ is a reactive monomer based "solvent free" primer for use with LOCTITE® anaerobic products for difficult to bond applications where galvanized steel or zinc electroplated surfaces are involved. This product was specifically formulated for increasing bond integrity on dichromated surfaces.

TYPICAL PROPERTIES

Specific Gravity @ 25 °C	1.03
Flash Point - See MSDS	
On Part Life, hours	≤1

TYPICAL PERFORMANCE

Fixture time and cure speed achieved as a result of using LOCTITE® 7091™ depend on the adhesive used and the substrate bonded.

Fixture Time, ISO 4587, minutes:

Steel using LOCTITE® 326™, two side primed	≤4 ^{LMS}
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(Fixture time is defined as the time to develop a shear strength of 0.1 N/mm²)

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).

Under no circumstances should activator and adhesive be mixed directly as liquids.

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. Use applicator provided to apply the primer by drops on one or both mating surfaces to be bonded. Contaminated surfaces may need special cleaning or degreasing prior to priming to remove any dissolvable contamination. If only one side can be primed, apply to the more difficult to bond surface.
2. For small gaps, treatment of only one surface may be adequate. If the surfaces to be bonded are porous, or if the gaps are large, for best results apply the primer to both surfaces. Over application must be carefully avoided as this will adversely effect bond integrity.
3. The primer will not dry and will remain active for up to 1 hour after application.
4. Apply the Loctite anaerobic product to one or both surfaces and assemble parts immediately. If primer is applied to one surface only, apply adhesive to the non-primed surface.
5. Where possible, move surfaces in relation to each other for a few seconds on assembly to properly distribute the adhesive and for maximum activation.
6. Secure the assembly and await fixturing before any further handling.

Loctite Material Specification^{LMS}

LMS dated September 1, 1995. 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

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Reference 1.1