



# LOCTITE® Instant Gasket

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## PRODUCT DESCRIPTION

LOCTITE® Instant Gasket provides the following product characteristics:

<b>Technology</b>	Elastomeric Rubber
<b>Chemical Type</b>	Elastomeric rubber
<b>Appearance (uncured)</b>	Black paste <sup>LMS</sup>
<b>Components</b>	One component - requires no mixing
<b>Viscosity</b>	Thixotropic paste
<b>Cure</b>	Atmospheric moisture
<b>Cure Benefit</b>	Room temperature cure
<b>Application</b>	Gasketing
<b>Specific Benefit</b>	<ul style="list-style-type: none"> <li>• Immediate sealability</li> <li>• Instant blow-out resistance</li> <li>• Replaces most cut gaskets</li> <li>• OEM certified</li> <li>• Resistant to ATF/oil/coolant</li> <li>• Low volatile</li> <li>• Consistent sealing</li> <li>• Low odor</li> <li>• Sensor safe</li> <li>• Non-corrosive</li> <li>• Non-slumping</li> </ul>

LOCTITE® Instant Gasket is a proprietary, hi-tech, elastomeric rubber gasketing compound designed to provide reliable "formed-in-place" gaskets for mechanical assemblies. It is designed specifically as a replacement for conventional cut gaskets where instant sealability is advantageous. This product resists aging, weathering and thermal cycling without hardening, shrinking or cracking. It has superior bonding properties to oil contaminated metals as compared to other formed-in-place gaskets, and maintains outstanding oil resistance. Typical applications include timing gear covers, transmission pans, valve covers, oil pans, water pumps, gearboxes, compressors, intake manifold end seals, and stamped sheet metal covers. This product is typically used in applications with an operating range of -60 °C to +232 °C and can intermittently reach temperatures up to +282 °C.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	1.3 to 1.37 <sup>LMS</sup>
Flash Point - See MSDS	
Extrusion Rate, g/min:	
Pressure 0.62 MPa, time 15 seconds, temperature 25 °C:	
Semco Cartridge	20 to 50 <sup>LMS</sup>
Blow Out Resistance, seconds:	
4 mm Flange, 1.5 mm Gap @ 0.014 MPa	≥100 <sup>LMS</sup>
Flow, ISO 7390, mm:	
After 2 minutes @ 25 °C	≤0.2 <sup>LMS</sup>

## TYPICAL CURING PERFORMANCE

### Cure Time

The surface of this adhesive becomes dry to the touch on exposure to atmospheric moisture within 5 minutes @ 25 °C / 50% RH. The product cures on exposure to moisture in the air and dries tack free in two hours, with full cure in 24 hours. Cure times will vary with temperature, humidity and gap.

### Instant Seal

Parts assembled with LOCTITE® Instant Gasket are instantly sealed and can be immediately placed into service.

### Tack Free Time

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

Tack Free Time, @ 22 °C, minutes 7 to 24<sup>LMS</sup>

## TYPICAL PROPERTIES OF CURED MATERIAL

Cured for 7 days @ 25 °C / 50% RH

### Physical Properties:

Shore Hardness, ISO 868, Durometer A	30
Elongation, ISO 37, %	≥400 <sup>LMS</sup>
Tensile Strength, ISO 37	N/mm <sup>2</sup> ≥1.7 <sup>LMS</sup> (psi) (≥246)

## TYPICAL PERFORMANCE OF CURED MATERIAL

### Adhesive Properties

Cured for 21 days @ 23 °C / 50±5 % RH and 0.5 mm gap

Lap Shear Strength, ISO 4587:

Mild steel	N/mm <sup>2</sup> 1 to 1.4 (psi) (150 to 200)
Aluminum 2024-T3	N/mm <sup>2</sup> 0.7 to 1.3 (psi) (100 to 190)
Alclad	N/mm <sup>2</sup> 1 to 1.5 (psi) (150 to 220)
Zinc dichromate	N/mm <sup>2</sup> 1 to 1.5 (psi) (150 to 220)

## TYPICAL ENVIRONMENTAL RESISTANCE

### Chemical/Solvent Resistance

LOCTITE® Instant Gasket retains effective properties in contact with automotive fluids, such as motor oil, transmission fluids, alcohol and antifreeze solutions

NOTE: Not recommended for parts in contact with gasoline

## GENERAL INFORMATION

**This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a lubricant 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. For assembly as form-in-place gasket**

1. Remove all previous material from mating surfaces.
2. For best results, clean and dry all surfaces with a residue-free solvent.
3. Cut nozzle to desired bead size, 1.5 to 6.5 mm. A bead size of 3 mm is usually sufficient for most applications.
4. Remove cap, puncture tube or cartridge seal and attach extension nozzle.
5. Apply a continuous and even bead of LOCTITE® Instant Gasket to one surface, first tracing the internal areas of the gasket configuration, then all surrounding bolt holes.
6. Assemble parts with 5 minutes while LOCTITE® Instant Gasket is still wet. Secure or tighten to recommended torque specs.
7. Re-torque will not be necessary after the product has cured.

**2. Clean up**

1. Allow excess material to extend beyond the extension nozzle or aerosol tip to cure, seal and protect the remaining product from moisture. For reuse, simply remove the cured product from the tip.
2. Remove uncured product from parts and hand-tools with a dry cloth. If skinned over, break film with a dry cloth to remove as much as possible and remove the remaining material.
3. Clean hands with a dry cloth or hand cleaner.

**Loctite Material Specification<sup>LMS</sup>**

LMS dated August 19, 2004. 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 1.0