



# Product 17430

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## PRODUCT DESCRIPTION

LOCTITE® Product 17430 is a single component, ready-to-use, gel like material that cures at room temperature. It improves flange-sealing reliability by overcoming the shortcomings of precut and other formed –in-place chemical gaskets. After curing between mating metal flanges and filling surface imperfections, it provides a tough, resilient, solvent and temperature resistant seal that flexes with flange movements caused by vibration, pressurization or thermal changes.

## TYPICAL APPLICATIONS

Making gaskets for pumps, housings, axle covers, gear cases, split crankcases and other areas where conventional gaskets are used. 17430 can also be used to repair damaged conventional gaskets or as coating/dressing for conventional gaskets.

## PROPERTIES OF UNCURED MATERIAL

	Typical Value	Range
Chemical Type	Methacrylate Ester	
Appearance	Blue	
Specific Gravity at 25°C	1.1	
Density (g/ml)	1.273	
Viscosity @ 22°C, cP		
Brookfield HBT		
Helipath Spindle @ 0.5 rpm		250,000-500,000
@ 5.0 rpm		100,000-200,000
Flash Point (TCC), °C (°F)	>93 (>200)	

## TYPICAL PROPERTIES OF CURED MATERIAL

Property (24 Hour Room Temperature Cure – unless noted)	Typical Value
Tensile strength, Type I Bog Bones, ASTM D882, heat cured 24 hrs@200C psi	243
Elongation to break, Type I Dog Bones ASTM D882, heat cured 24 hrs@200C, (%)	64%
Tensile Strength, ASTM 2095, Tensile Pins, as received (psi)	110
Tensile Shear Strength .010" gap, ASTM D1002, (psi)	
As received steel lap shears	298
As received aluminum lap shears	175
Peel (180° Vertical Peel), ASTM 625 lbs./linear inch (pli)	4.90

**Fixture Time**, Passivated Steel and Aluminum, Time to support 3 kg weight w & w/o Primer N

Material	Configuration	Time
Aluminum	0 gap, Unprimed	15-20 minutes
	0 gap, 1 side primed	1-2 minutes
	10 mil gap, 1 side primed	1-1.5 hours
Steel	0 gap, Unprimed	>2 hours
	0 gap, 1 side primed	5-10 minutes
	10 mil gap, 1 side primed	1.5-2 hours

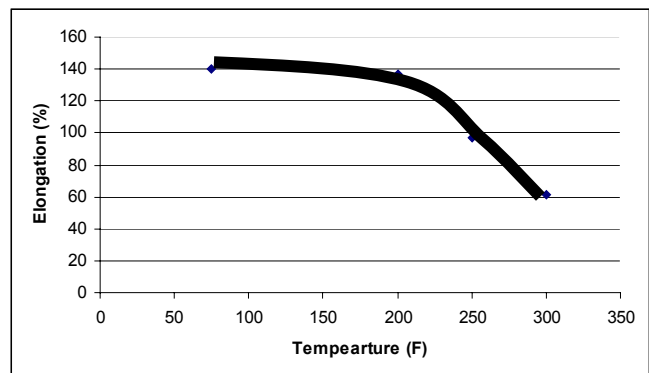
**Room Temperature Tensile Shear Strength**, Passivated Steel and Aluminum (24 hr RTC or 24 hrs @200 F, psi)

Material	Configuration	RTC	Heat Cured
Aluminum	0 gap, 1 side primed (Primer N)	130	604
	10 mil gap, 1 side primed (Primer N)	209	324
Steel	0 gap, 1 side primed (Primer N)	97	456
	10 mil gap, 1 side primed (Primer N)	258	347

**Solvent Resistance / Sealing** – Homelite Testers, Psi to failure, 24 hour RTC cure @ 10 mil gap, Primer N, one side, 48 hour exposure time, Tested at Room Temperature

Solvent Exposure	Specimen	Psi
Air @ 300° F	1	<20
	2	100+
	3	100+
50/50 Glycol Water @ 280°F	1	100+
	2	<20
	3	<20
Motor Oil @ 320°F	1	100+
	2	100+
	3	100+

**Elongation after Heat Aging**, Type 4 Dog Bones, UV Cured (70,000 microwatts/cm<sup>2</sup>, 20 seconds/side, Conditioned 24 hours at temperature



**Product Benefits**

**Improved Reliability**

- Seals all surface gasket imperfections
- Eliminates gasket compression set and bolt loosening
- Seals most common industrial fluids
- No cracking or shrinking during cure

**Cost Savings**

- Reduces cut gasket inventories
- Reduces machining operations

- Eliminates costly re-torquing operations
- No waste from cure in open containers

**Easy Application**

- No, Migration, can be applied to vertical surfaces
- No mixing required
- No curing outside joint
- N curing in open containers
- Can be applied via screen printing, roll coating and manual or robotic tracing

**How to Apply**

Apply with a roller to give a uniform coating or lay down a bead with a cartridge or a squeeze tube. Silk Screening may also be used. Gasket material should be applied to the unprimed flange in the joints when screening or rolling. If the material is applied as a bead, it can be laid down on a primed surface. This allows for priming of both sides to increase fixture time, cure speed and cure through volume.

Cure on active surfaces (e.g. iron, plain steel, commercial aluminum) without a primer. If faster cure speeds are desired Primer N is recommended. Primer is required for passivated / rust proofed surfaces. The use of a primer will also increase cure speed and cure through depth on inactive metals (e.g. anodized aluminum, stainless steel, plated, parts).

**USE AND APPLICATION**

**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).**

**Storage**

Product should be stored refrigerated at approximately 0°C (32°F). When using the product, it should ideally be used at ambient conditions between 8°C to 28°C (46°F to 82°F). To prevent contamination of unused product, do not return any material to its original container. Product shelf life is 1 year (minimum) from date of manufacture. For further specific shelf life information contact the Loctite Quality Department.

**Data Ranges**

The data contained herein may be reported as a typical value and/or range. Values are based on actual test data and are verified on a periodic basis.

**Note**

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