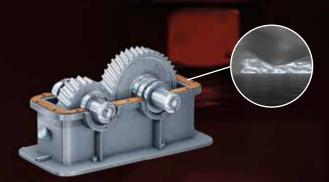
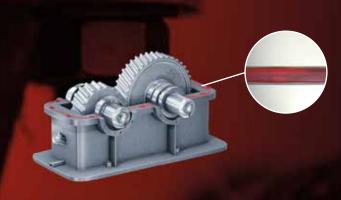
# GASKETING PRODUCTS

# Cut gaskets leak. We seal.





#### PROBLEM

With compression gaskets: Not all surface imperfections are filled. They distort, relax under compression and displace from the joint.

#### SOLUTION

With liquid gaskets:

When assembled, all surface imperfections are filled, adding structural stiffness and eliminating micromovement and slipping. They do not shrink, crack or suffer from relaxation.

## Liquid gaskets hold up better. **For longer lasting seals.**

To provide a leak-free seal over a long period of time, gaskets must fill voids and be resistant to liquids and / or gases, while withstanding the operating temperatures and pressures to which they are subjected. LOCTITE offers a range of gasketing products designed for any flange type, gap size or material.



## How to choose a gasketing product.



**FLANGE TYPE** 

#### **RIGID MACHINED FLANGES**

Rigid, machined flange surfaces typically are designed for no gap, allowing for metal to metal contact. For these assemblies anaerobic liquid gaskets are the best choice because they provide the highest strength seal.

#### STAMPED OR FLEXIBLE FLANGES

Typically thinner, stamped metal flanges can have larger gaps that need to be filled. They are also subject to more flex in service. For these types of assemblies, silicone liquid gasketing products provide the best seal.



## LOCTITE 518 Pen

#### No-Drip, No-Mess

The new LOCTITE 518 Pen is a leak-fighting flange sealant with an easy to apply roll-on applicator. It's the fastest way to apply reliable and long-lasting liquid gaskets, without any mess or waste. Rigid, machined flange surfaces typically are designed for no gap, allowing for metal to metal contact. For these assemblies anaerobic liquid gaskets are the best choice because they provide the highest strength seal.

#### **Benefits:**

- P1 NSF Reg. No.: 123758
- High viscosity
- Semi-flexible



Flange type: Rigid machined flange







## **LOCTITE SI 5910**

#### **High Adhesion**

LOCTITE SI 5910 is a low strength, silicone-based gasketing product designed for use on flexible flanges with machined or cast surfaces. It has good resistance against oil and joint movement. Typical applications include stamped sheet metal covers. Typically thinner, stamped metal flanges can have larger gaps that need to be filled. They are also subject to more flex in service. For these types of assemblies, silicone liquid gasketing products provide the best seal.

#### **Benefits:**

- 1K silicone, requires no mixing
- Excellent resistance to automotive engine oils
- The thixotropic nature reduces the migration of liquid product after application to the substrate



Flange type: Stamped/flexible flange

#### **GASKETING PRODUCTS**

## Find the right product for your application



## **©** FLANGE TYPE

#### **Rigid Machined Flange**

LOCTITE 518 LOCTITE 518 PEN LOCTITE 510 LOCTITE 5188 LOCTITE 5800 LOCTITE NS 5540

#### **Stamped Flange**

LOCTITE SI 5699 LOCTITE SI 5900 LOCTITE SI 5910 LOCTITE SI 5970 LOCTITE SI 5980 LOCTITE SI 5300

For specific details on viscosity see the Technical Data Sheet.



Colour: Red Viscosity: 750,000 mPa·s thixotropic paste Temperature resistance: 150 °C Cure Method: Anaerobic

**Rigid Machined Flange** 



Colour: Pink Viscosity: 90,000 mPa-s thixotropic paste Temperature resistance: 200 °C Cure Method: Anaerobic



Colour: Red Viscosity: 22,000 mPa•s thixotropic paste Temperature resistance: 180 °C Cure Method: Anaerobic



Colour: Red Viscosity: 750,000 mPa+s thixotropic paste Temperature resistance: 150 °C Cure Method: Anaerobic



Colour: Red Viscosity: 21,000 mPa·s paste Temperature resistance: 150 °C Cure Method: Anaerobic



Colour: Brown Viscosity: 48.000 mPa•s Temperature resistance: 704 °C Cure Method: Heat Cure



\* Optimised Health & Safety products focusing on people safety. Enhancing safety in production, application and end-use.

## **Stamped Metal Flange or Flexible Flange**



LOCTITE SI 5699 **Chemical Resistant** 

Colour: Grey Viscosity: Paste Temperature resistance: 200 °C Cure Method: Moisture



Colour: Black Viscosity: Paste Temperature resistance: 200 °C Cure Method: Moisture



Colour: Black Viscosity: Paste Temperature resistance: 200 °C Cure Method: Moisture



Colour: Black Viscosity: Paste Temperature resistance: 200 °C Cure Method: Moisture



Colour: Black Viscosity: Paste Temperature resistance: 200 °C Cure Method: Moisture



Colour: Red Viscosity: Paste Temperature resistance: 300 °C Cure Method: Moisture

#### **PLEASE CONTACT YOUR HENKEL REPRESENTATIVE** FOR MORE INFORMATION

on the full range of gasketing products.

### **Surface Preparation**



A solvent-based, general purpose parts cleaner formulated for metals. The product is able to remove most oils, greases, lubrication fluids, metal cuttings and dries residue-free.



Designed to remove dried chemical gaskets by softening the material on the flanges. Once applied, the product develops a foam-like layer on the gasket, preventing the agent from running off the desired location, thus working for the entire duration. Typical applications include removal of all types of chemical gaskets from metal flanges. It is particularly suitable for aluminium or other soft metal flanges where scraping could lead to surface damage.

## Equipment



LOCTITE 97002 300 ml Pneumatic Cartridge Dispenser IDH 88632

It is a pneumatic dispenser for applying products from 300 ml cartridges. Pneumatic pressurisation minimises operator fatigue. Flow rate is controlled via the integrated pressure regulator. The operator controls the amount by holding down the trigger.





Dispenser for adhesives and sealants in 290 ml, 300 ml and 310 ml plastic and aluminium cartridges.

Please refer to page 130 for additional equipment/information.



Designed to promote the curing speed of LOCTITE anaerobic adhesives and sealants without any significant loss of strength. Especially recommended for applications with passive metals or inert surfaces and with large bond gaps.

RIGID MACHINED FLANGES									
Product	Pack Size	Colour	Features	Max Gap Fill, Non activated* (mm)	Thixotropic (Yes/No)	Temperature Range (°C)	Fixture Time on Steel (min.)		
LOCTITE 518	25 ml, 50 ml, 300 ml	Red	Semi-flexible, for use on rigid iron, steel and aluminium flanges	0.25	Yes	-55 to +150	25		
LOCTITE 518 Pen	25 ml	Red	Roll on applicator	0.125	Yes	-55 to +150	25		
LOCTITE 510	50 ml, 160 ml, 250 ml, 300 ml	Opaque pink	High temperature applications	0.25	No	-55 to +200	25		
LOCTITE 5188	50 ml, 300 ml	Red	Flexible, for steel and aluminium flanges	0.25	Yes	-55 to +150	25		
LOCTITE 5800	50 ml, 300 ml	Red	For rigid flanges, enhanced health and safety	0.25	Yes	-55 to +180	25		
LOCTITE NS 5540	430 g, 850 g	Brown	High temperature	0.125	No	-40 to +704	Heat cure product		

\* Note: To increase gap fill, use an activator \*\* Different viscosity test used

STAMPED	OR FL	EXIBLE	FLANGES

Product	Pack Size	Colour	Features	Extrusion Rate (g/min.)	Temperature Range (°C)	Tack Free Time (min.)
LOCTITE SI 5300	310 ml	Red	High temperature	250	-55 to +300	8
LOCTITE SI 5699	80 ml, 300 ml	Grey	For flexible flanges, machined or cast surfaces, metal or plastic, increased oil resistance	200	-55 to +200	30
LOCTITE SI 5900	300 ml	Black	Excellent oil resistance, high adhesion, high joint movement, excellent in water/glycol	30	-55 to +200	15
LOCTITE SI 5910	300 ml	Black	High joint movement, oil resistance, good on wide variety of plastics, glasses, ceramic, metals	500	-55 to +200	40
LOCTITE SI 5970	300 ml	Black	Excellent oil resistance, high joint movement, can be used with painted parts	60	-55 to +200	25
LOCTITE SI 5980	100 ml	Black	General purpose with excellent oil resistance	220	-55 to +200	30

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## A Costly 5 % Leakage Rate Eliminated

"A high leakage rate was causing warranty claims and production delays. LOCTITE's Engineering Solutions Expert helped us completely eliminate the problem."



A LOCTITE Engineering Solutions Expert showed the plant's team how to clean flange surfaces and dispense **LOCTITE 518** in a continuous bead. Immediately following assembly, **LOCTITE 518** fills the gaps between the flange surfaces and the products can be instantly pressure tested to 2 bar. Leaks have now been eliminated and disassembly is easier for customers.

#### **BENEFITS**

#### LOCTITE 518 Gasket Sealant:

- Seals more effectively, eliminating leakage during operation
- Sustains low pressure testing of 1 bar immediately upon assembly
- Easily disassembles with a small amount of cleavage force