

Henkel – The Solution Provider

Henkel – Partner of the automotive industry

- Based on innovative chemistry solutions and process know how, Henkel helps manufacturers to ensure outstanding quality in a smooth and efficient production process
- Close and constant cooperation with the automotive industry's R&D partners is the key to success

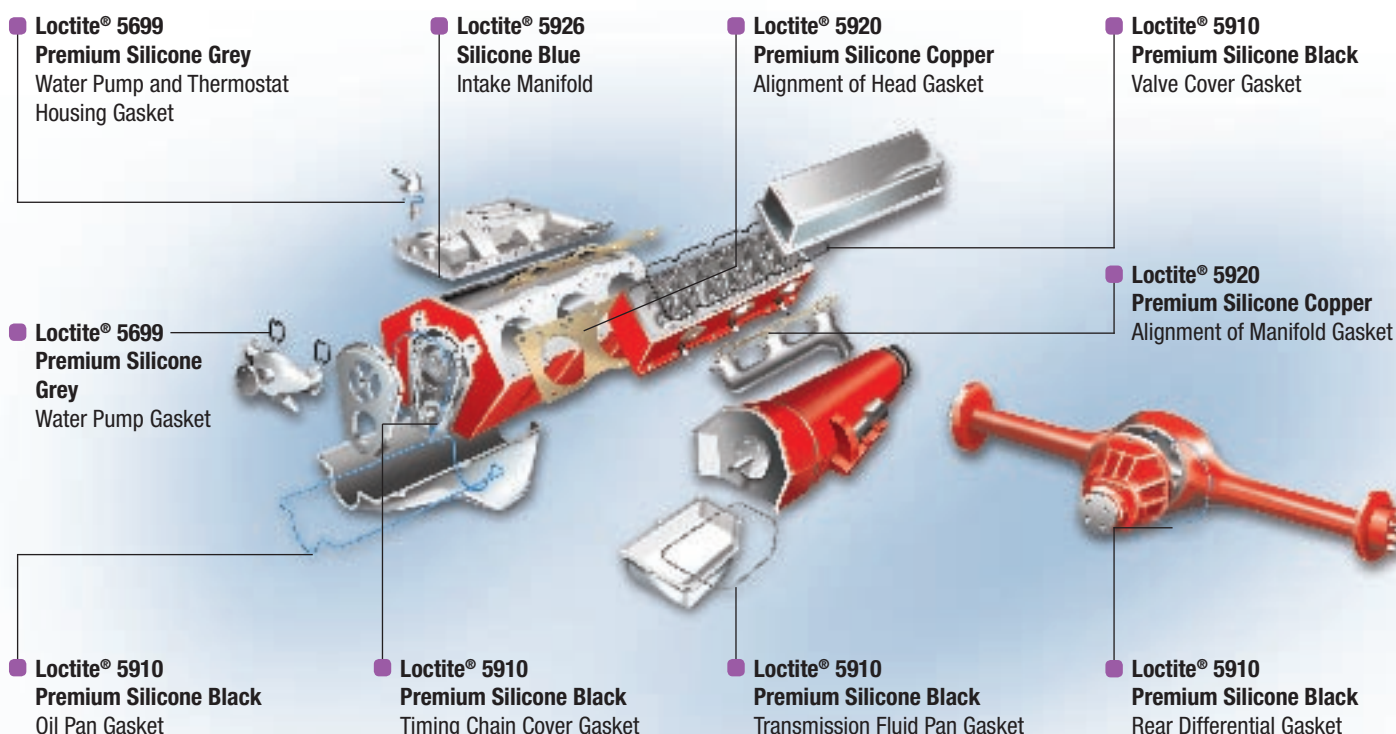
Loctite® products in automotive manufacturing

- Loctite® adhesives and sealants from Henkel have been used successfully for decades by major car makers worldwide on engines, gearboxes, axles, etc.
- Loctite® engineers, working together with many major auto makers, have played a decisive role in shaping the progress of silicone technology and developing the designs required for effectively sealing flanges

Silicone applications

- Assemblies made with pressed components, plastic parts or a combination of dissimilar materials require a flexible sealant designed to tolerate movement under high load and resist high temperatures and exposure to oils and/or coolants
- Specially formulated silicone sealants have lived up to these challenges as they have good adhesion, allowing them to flex with flange movements

Examples for Silicone Gasketing Applications



Henkel & Motor Sports

A World of Engineering Solutions and Customer Support

Around the world, Henkel has an extensive commitment to motor sports where reliable performance must be delivered in the most extreme conditions. As Official Partner and Supplier to the Dakar Rally for several years, Henkel has supported the competing teams with products that reflect the company's innovation and technological excellence. Over the years, close contacts have developed into a strong relation of mutual trust and understanding, built on the competent service and the high-quality adhesives and sealants offered for fast and efficient repairs which have helped many drivers to make it to the finish line.

Dakar Rally – Gasketing Application

Challenge:

Replacement of a truck oil pan

Repair steps:

- Use Loctite® 7200 Gasket Remover to remove residues on flanges
- Spray with Loctite® 7063 Cleaner to remove oil, dirt etc. from the surfaces
- Apply a continuous bead of Loctite® 5910 Quick Gasket to the oil pan and assemble the parts



Benefits:

- Instant sealing
- Excellent oil resistance
- Flexible sealant
- Very good gap filling properties
- Very good vibration resistance
- High adhesion



The data contained herein are intended as reference only. Please contact your local Henkel Technical Support Group for assistance and recommendation on specifications for these products.

Henkel Limited

Wood Lane End
Hemel Hempstead
Hertfordshire HP2 4RQ
Tel. 01442 278000
Fax 01442 278071

www.loctite.co.uk

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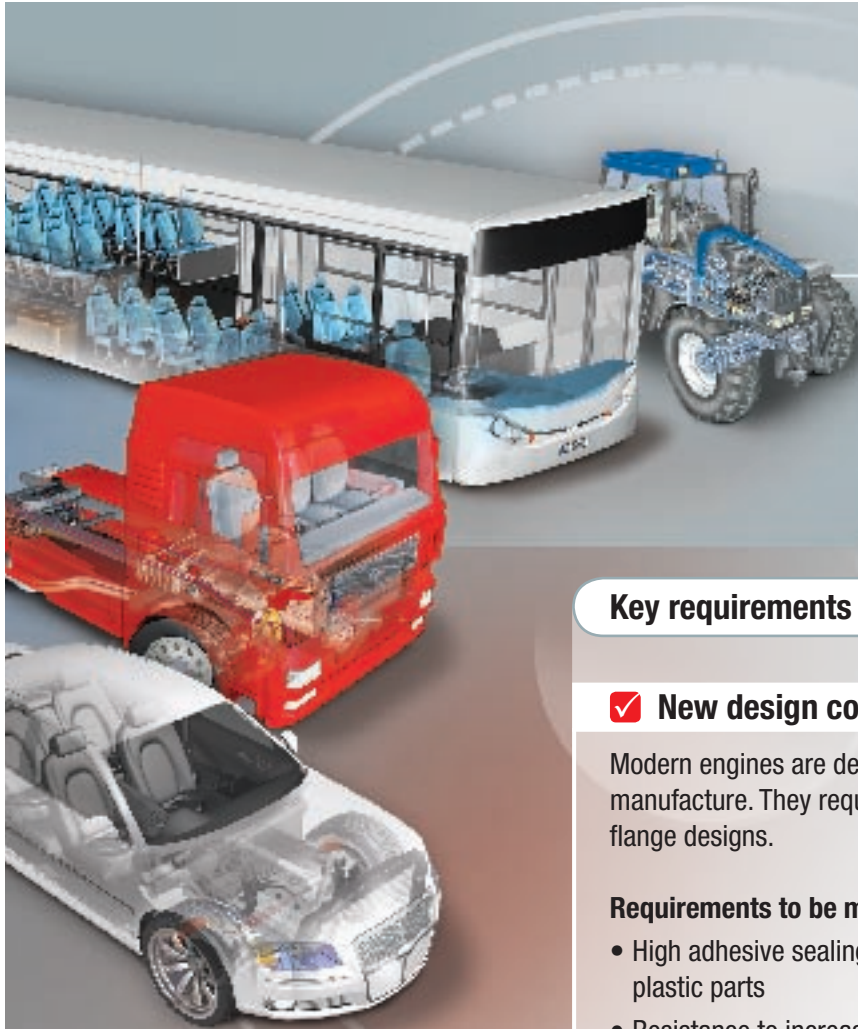
Flexible Gasketing and Sealing Solutions

Recommended by the Professionals
– used by the Best



Henkel





Key requirements for modern silicone products



✓ New design compatibility

Modern engines are designed to be compact, energy efficient and easy to manufacture. They require a wider range of materials and more demanding flange designs.

Requirements to be met by silicone sealants:

- High adhesive sealing performance on a wide range of modern metal and plastic parts
- Resistance to increased vibration and flange movement

✓ Oil resistance

Extended service intervals, lower exhaust emissions, reduced wear, etc. call for state of the art high-performance oils.

Requirements to be met by silicone sealants:

- Resistance to mineral, semi-synthetic and synthetic oils, and oil with high contamination levels due to extended service intervals

✓ Temperature resistance

As a result of optimized power train components and compact designs, parts are exposed to higher temperatures.

Requirements to be met by silicone sealants:

- Resistance to oil temperatures up to 150 °C
- Resistance to high temperatures near heat-carrying assemblies such as exhaust systems and turbo chargers

✓ Coolant resistance

Elevated oil temperatures place higher demands on cooling systems.

Requirements to be met by silicone sealants:

- Resistance to the latest coolant technology and temperatures up to 120 °C

Loctite® silicone sealants from Henkel have been thoroughly tested in cooperation with auto makers, confirming their capability to meet the most exacting demands.

Henkel also performs stringent in-house quality control tests to ensure maximum quality standards.



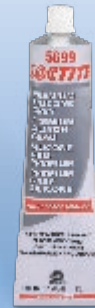
Gasketing Repair Products

- Formulated to meet a broad range of complex gasketing and sealing needs
- Fill all voids with excellent fluid and temperature resistances
- Parts can be disassembled easily even after extended service

Loctite® 5910



Loctite® 5699



Loctite® 5920



Product colour	Black	Grey	Copper
Gap	Up to 1 mm	Up to 1 mm	Up to 1 mm
Temperature resistance	-55°C to 250°C*	-55°C to 250°C*	▶ -55°C to 350°C*
Oil resistance	▶ Excellent	Very good	Very good
Water / glycol resistance	Good	▶ Excellent	Good

* intermittent

Practical Hints:

- If there are traces of old gasket left on the parts to be sealed, clean with Loctite® 7200 Gasket Remover
- All parts must be clean and dry before sealing—use Loctite® 7063



Loctite® 5910 Premium Silicone Black Gasket Maker / Sealant

- For flanges with permanent oil contact
- Can be used for metal, plastic and painted parts
- Low odour, non corrosive

Typical uses:

Oil sump, valve cover, inlet manifold, timing chain cover, transmission cover, differential cover, etc.

Pack sizes	IDH No.
Blister card 40 ml	1133305
Tube 80 ml	1126633
Quick Gasket 200 ml	728771
Cartridge 300 ml	142491



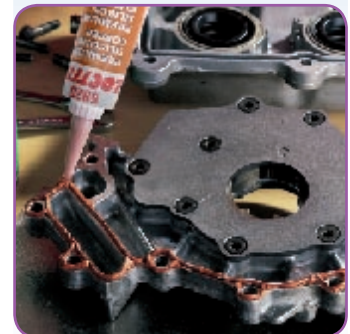
Loctite® 5699 Premium Silicone Grey Gasket Maker / Sealant

- For flanges with permanent water / glycol contact
- Can be used for metal, plastic and painted parts
- Low odour, non corrosive

Typical uses:

Water pump, thermostat, valve cover, inlet manifold, transmission pan, differential cover, etc.

Pack sizes	IDH No.
Blister card 40 ml	1124088
Tube 80 ml	1126648
Cartridge 300 ml	142480



Loctite® 5920 Premium Silicone Copper Gasket Maker / Sealant

- For flanges exposed to high temperatures and high performance engines
- Can be used for metal, plastic and painted parts
- Low odour, non corrosive

Typical uses:

Turbo and exhaust systems, oil sump, valve cover, inlet manifold, timing chain cover, differential cover.

Pack sizes	IDH No.
Blister card 40 ml	1124086
Tube 80 ml	1126645
Cartridge 311 g	235479

Sealing Repair Products

Loctite® 5926



Blue

Up to 1 mm

-55 °C to 250 °C*

Good

Good

Loctite® 595



Clear

Up to 8 mm

-55 °C to 250 °C*

Excellent

Excellent

Loctite® 5940



Black

Up to 8 mm

-55 °C to 250 °C*

Excellent

Excellent

- For flexible bonding and sealing applications

Product colour

Gap

Temperature resistance

Water resistance

Weathering resistance

* intermittent



Loctite® 5926 Silicone Blue Gasket Maker / Sealant

- Multi purpose flexible silicone sealant
- For flanges of any size or shape
- Can be used for metal, plastic and painted parts

Typical uses:

Oil sump, valve cover, inlet manifold, timing chain cover, transmission cover, transmission pan, differential cover, water pump, thermostat etc.

Pack sizes	IDH No.
Blister card 40 ml	1123349
Tube 100 ml	1126639
Cartridge 310 ml	233862



Loctite® 595 Silicone Clear Sealant

- Bonding, sealing and protecting of components subjected to shock, constant vibration, twisting, flexing, thermal expansion and contraction

Applications:

Suitable for glass, metal, ceramics, composites, and most plastics.

Pack sizes	IDH Nr.
Blister card 40 ml	1123422
Tube 100 ml	1126642
Cartridge 300 ml	xxx



Loctite® 5940 Silicone Black Sealant

- Room temperature vulcanising (RTV) silicone
- High temperature protection

Applications:

For bonding and sealing in automotive and household electrical appliances.

Pack sizes	IDH Nr.
Blister card 40 ml	1123347
Tube 100 ml	1126635
Cartridge 300 ml	xxx

Practical Hints:

- Silicones are **not** over paintable
- Very good for sealing large exterior painted areas (e.g. trucks)
- Extremely high UV resistance