

GG Flange Sealants

Anaerobic Gasketing Compounds



Fast Acting Glandless Seal:

Parker Anaerobic GG Flange Sealants are typically used as a form-in-place gasket on rigid flanged connections, such as gearboxes engine casings, pumps, cover shafts, thermostats, compressors, transmission housings and axle covers. They are commonly used to seal flange applications in industries such as Oil & Gas, General Industrial, Chemical and Automotive.

When applied, these compounds quickly cure in the absence of air, while excess product will remain liquid. Additionally, they are compatible with oils and most hydraulic fluids.



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Benefits:

- Quick and easy application
- Helps prevent corrosion
- Partial cure possible in only 30 minutes
- Available in distinctive colors: violet, orange, and red
- Good temperature and solvent resistance (see properties chart on next page)



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Application

Recommended for sealing small gap flange applications. Parker GG Series is typically used for applications in the chemical processing, petroleum refining, pulp/paper, waste treatment, textile, utilities/power generation, marine, automotive, industrial equipment, fluid power systems, bulk gas compression and transport industries.

How to select a Flange Sealant:

All applications have three aspects to be considered:

1. Assembly
2. Use
3. Disassembly

Required performance for each of these three aspects and substrates are the key factors for successful application.

1. Assembling:

Surface Condition: Surfaces should be cleaned of all contaminants such as oils. When present, contaminants can reduce adhesion effectiveness.

Types of substrate: Flange Sealant cure time will vary based on substrate material and use of activator. Some substrates will need activators to cure and/or improve cure time and strength. Please consult the Surface Activity Table 1.

Product selection: the product choice depends on how much "gap" space is between the two surfaces to be mounted. Refer to product matrix to determine which

GG product to use for your gap to be sealed.

2. Use:

Temperature: The Parker GG Flange Sealants temperature range should be kept within the specified temperature range for the corresponding product (see Properties Chart below).

Fluid resistance: Product is compatible with most petroleum based engine and hydraulic oils as well as gasoline, brake fluid, water glycol mixes, ethanol and acetone. Product is not recommended with strong acids, chlorine or oxygen. (For non-standard fluids specific development is required.)

3. Disassembling:

Due to their applications, Parker GG Sealants are of low to moderate strength, for easier disassembly.

Substrate activity comparison

The rate of cure will depend on the substrate used. Anaerobic based materials will react faster and stronger with active

Surface Activity		
Active	Med-Active	Inactive
Unplated Steel	Zinc	Galvanized Zinc
Copper	Aluminum	
Brass	Stainless Steel	
Iron	Stainless Steel	
Nickel		

Table 1

metals. However, inactive metals will require the use of an activator to obtain maximum strength and cure speed at room temperature. Table 1 shows comparison of substrate and it's relationship to cure activity.

Usage Guidelines

- For best performance, surfaces should be clean and free of grease
- Product should be applied to the sealing surfaces in sufficient quantity so no voids are present
- Use accepted trade practices to assemble and tighten flange bolts evenly (in a star pattern)
- Select product based on gap to fill (however, minimizing gap increases effectiveness)
- For maximum pressure and solvent resistance, allow at least 24 hours set time before pressurizing system

For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

Storage

- Store product in a clean, dry location, in its original container, between 47°F (8°C) and 83°F (28°C)
- To avoid product contamination, do not return used product to original container. Parker Hannifin does not 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 Parker Applications Engineer

GG Flange Sealants Typical Property Chart

Product	Working Temperature	Activator Used	Max. Gap Allowed mm	Viscosity	Total Setting Time Hours	Partial Setting Time, as noted	Chemical Base	Cure Activator	Torque
				mPa·s (cP)					
GG22	-58 to 392°F (-50 to 200°C)	ST02	0.8	275000 to 950000	3	30 to 60 min.	Methacrylate Esther	Anaerobic	Low
GG23	-58 to 302°F (-50 to 150°C)	ST02	0.5	30000 to 100000	24	150 to 180 min.	Methacrylate Esther	Anaerobic	Medium
GG25	-58 to 302°F (-50 to 150°C)	ST02	0.8	800000 to 3750000	24	150 to 180 min.	Methacrylate Esther	Anaerobic	Low

