



Scotch-Weld™

Gasket Maker Anaerobic Adhesives

GM10 • GM18 • GM74

Technical Data

November 2016

Product Description	3M™ Scotch-Weld™ Gasket Maker Anaerobic Adhesives are one-component anaerobic sealants formulated to replace pre-cut gaskets or used as form-in-place gaskets that cure at room temperature and seal rigid assemblies of any shape or size with high temperature (300°F - 400°F) resistance. Additionally, these products fill pits, scratches, and gouges in the flange surface without having to grind or skim the mating surfaces.		
Specific Features	<ul style="list-style-type: none"> • 3M™ Scotch-Weld™ High Temperature Gasket Maker GM10 is a fast set, form-in- place gasket maker for many rigid, metal assemblies in high temperature (400°F) applications. It can be applied by tube, tracing, roll coating, screen printing to provide an instant low pressure seal. • 3M™ Scotch-Weld™ Gasket Maker GM18 is a tough, flexible form-in-place gasket maker ideal for sealing fitting joints and flanges such as gearbox and engine casings, fuel and water pumps, auto thermostats, pipe flanges, and other mated surfaces. It is compatible with aluminum applications and also provides an instant low pressure seal and does not shrink or relax. 		
Common Features	<ul style="list-style-type: none"> • Prevent corrosion • Paste (before cure) • 24 h cure at room temperature 	<ul style="list-style-type: none"> • Shock and vibration resistance • Fast setting • Seal against fluid leakage 	
Typical Uncured Physical Properties	Note: The following technical information and data should be considered representative or typical only and should not be used for specification purpose		

	GM10	GM18	GM74
Color	Red	Red	Red
Chemistry	Modified Urethane Acrylate	Modified Urethane Acrylate	Modified Urethane Acrylate
Viscosity (cP)	250,000-750,000 ¹ 40,000 – 100,000 ²	300,000-700,000 ³ 300,000-700,000 ⁴	50,000-150,000 ⁵ 20,000-40,000 ⁶
Fixture time* (min)	15 ^a (<30) ^b	15 ^a (<30) ^b	29 ^a (<30) ^b

¹ Brookfield Viscometer -E at spindle T-D at 2.5 rpm; ² Brookfield Viscometer spindle T-D at 20 rpm ³ Brookfield Viscometer spindle T-E at 2.5 rpm. ⁴ Brookfield Viscometer spindle T 20 rpm. ⁵ Brookfield RVT #6 @ 2.5 rpm. ⁶ Brookfield RVT #6 @ 2.5 rpm. *Reference ISO 10964. ^a Average time; ^b Range;

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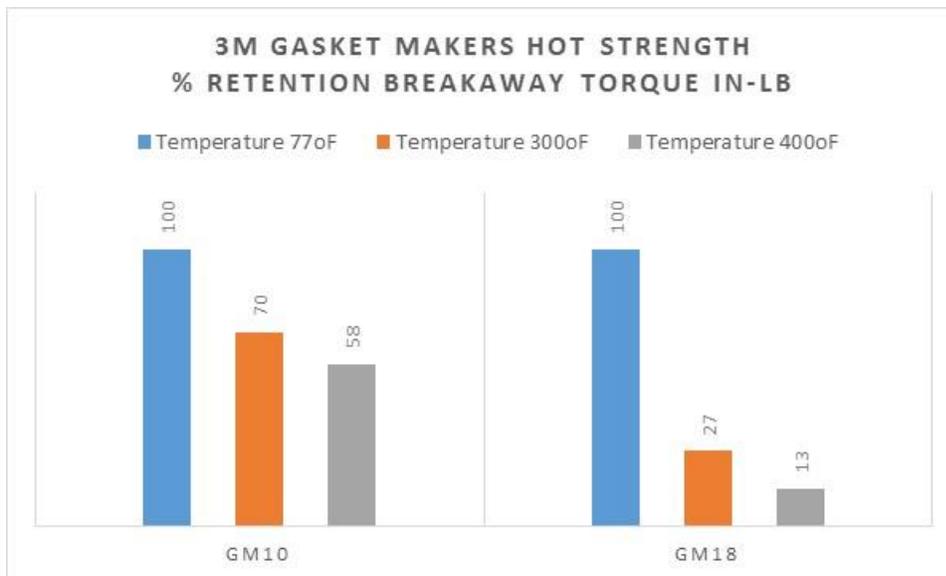
**Typical cured
Physical
Properties**

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purpose

	GM10	GM18	GM74
Color	Red	Red	Orange
Hardness	Rigid	Flexible	Flexible
Breakaway Torque (in.lb) *	170 ^a (130 – 190) ^b	95 ^a (70 - 110) ^b	35 ^a (25 - 60) ^b
Prevailing Torque (in.lb) *	140 ^a (90 – 180) ^b	95 ^a (60 - 120) ^b	35 ^a (20 - 50) ^b
Temperature Range (°F)	-65 to 400	-65 to 300	-65 to 300

*Reference ISO 10964. To convert to (N.m) divide (in.lb) by 8.851. ^a Typical value; ^b Range

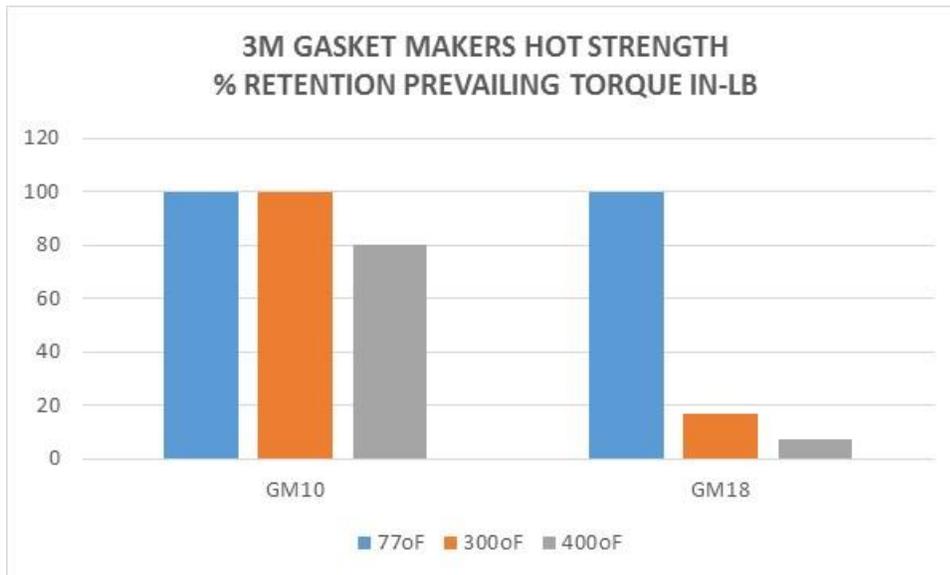
Hot Strength (measured at temperature)



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Handling Information

Directions for Use:

3M™ Scotch-Weld™ Gasket Maker Anaerobic Adhesives are not recommended for use on most plastics due to potential cracking of plastic parts. Also, they are not recommended for use in piping systems that contain pure oxygen or an oxygen-rich environment, chlorine, or strong oxidizing substances.

For Assembly:

1. Ensure parts are clean, dry and free from oil, grease and dirt. For best results, clean and dry parts with solvent or 3M™ Scotch-Weld™ Activator. (Activator can also be used on inactive surfaces or to accelerate the cure on active surfaces.). NOTE: Use of a 3M™ Scotch-Weld™ Activator may reduce bond strength depending on substrates and gap. Testing is recommended to evaluate the effect.
2. If not sure of surface type, always use activator. Refer to Material surface Activity and Cure Speed section for more information.
3. Apply a continuous bead of adhesive by hand tracing or by automated tracing equipment onto one surface of the flange or mating part. Circle all bolt holes. 3M™ Scotch-Weld™ Gasket Maker Anaerobic Adhesives can also be applied by screen printing, roll coating, pads, etc.
4. Assemble parts and tighten as soon as possible. Making sure to apply fastening pressure evenly on all sides of the mated assemblies.

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Material	Active (Fast cure)	Inactive (Slow cure)
Surface Activity and Cure Speed	<ul style="list-style-type: none">• Brass• Bronze• Commercial aluminum• Copper• Iron• Kovar®• Manganese• Monel®• Nickel	<ul style="list-style-type: none">• Anodized Aluminum• Cadmium• Chemical black oxide• Galvanized steel• Gold• Inconel®• Magnesium• Magnetite Steel• Plated parts• Pure aluminum• Silver• Stainless Steel• Zinc

Storage	Store product in cool, dry area out of direct sunlight
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Shelf Life	3M™ Scotch-Weld™ Threadlocker Anaerobic Adhesives have a shelf life of 12 months when stored at 60° to 80°F (16° to 27° C) in the original unopened container.
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Precautionary Information	Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. For additional health and safety information, call 1-800-364-3577 or (651) 737-6501.
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Technical Information	The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.
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Product use	Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.
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ISO 9001:2000

This product was manufactured under a quality system registered to ISO 9001:2000 standards.

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