

# 3M™ Scotch-Weld™ Anaerobic Adhesives



Applications success  
for threadlocking, sealing,  
retaining, and gasketing



# Lock & seal to run tight, run long

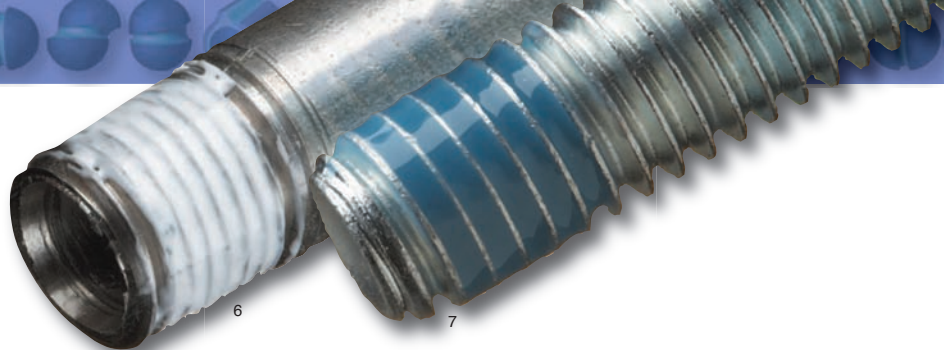


Threadlocker  
Pipe sealant  
Retaining  
compound  
Gasket  
maker

Keep equipment and production up and running. When you need secure fits, 3M™ Scotch-Weld™ Anaerobic Adhesives offer a wide selection of properties to help save the time and cost of disruptive, unscheduled downtime due to leaks and loose fasteners.

For threadlocking, sealing, retaining, and gasketing, application is fast and easy with just a targeted squeeze of a bottle or tube. In the absence of oxygen and in the presence of metal, the anaerobic formulation cures quickly to a polymer that seals, secures, and retains.





### Prevent loosening



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### Tighten tolerances



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### Fill voids



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#### 3M™ Scotch-Weld™ Threadlockers

Apply to nuts, bolts, and screws to prevent loosening from vibration and impact in such applications as gear housings, motor mounts, and sprinkler heads.

- Fill and seal threads completely to help stop corrosion, rust, and leaks
- Securely hold dissimilar metals
- Choice of break and prevailing strengths
- Tested Military specification: MIL-S-46163A

#### 3M™ Scotch-Weld™ Retaining Compounds

Bond and seal non-threaded, co-axial components such as bearings, gears, shafts, cylinder liners, and rotors.

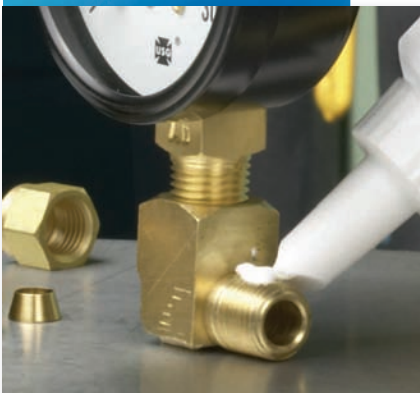
- Tighten tolerances in worn bearing seats, keys, splines, tapers, shims, and shafts
- Increase load-bearing characteristics of cylindrical joints to reduce assembly stresses and cost
- Prevent fretting and corrosion

#### 3M™ Scotch-Weld™ Gasket Makers

Fill and seal voids between metal flanges to eliminate pre-cut or compression gaskets.

- Seal dissimilar metals without shrinkage
- Metal-to-metal clamping without shimming effect or creeping
- Pressure and solvent resistance
- Save time and work of re-torquing
- Cure to rigid or flexible seal

### Seal instantly



#### 3M™ Scotch-Weld™ Pipe Sealants

Seal instantly to stop leaks when applied to threads or compression fittings of most metal and certain plastic pipes. Replace traditional PTFE tapes and dope without shredding, evaporation, or shrinkage.

- Seals and helps prevent the waste and mess of leaking hydraulic fluids, oil, fuel, and lubricants
- Resists pressure, vibration, and expansion/contraction of temperature cycling
- Apply to any pipe size, reducing the inventory of multiple size, easy-to-damage O-rings
- Prevents galling

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# Product Selection

## Threadlocker Anaerobic Adhesives

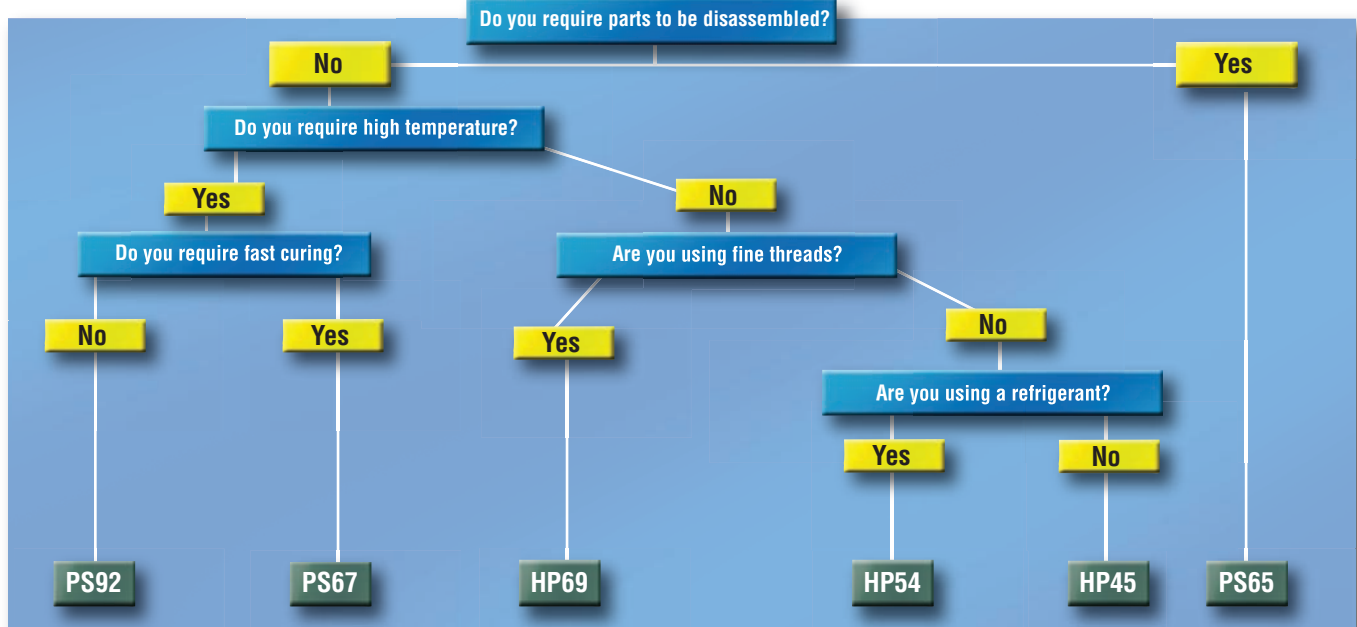


Product	Typical Use	Color	Typical Viscosity (cps)	Temperature Range	Time to Handling	Full Cure (hours)	Size	UPC	Stock #
TL22	Screwlock – Low removal torque fasteners less than a 1/4" (6mm) (HTR <sup>1</sup> )	Purple	1200	-65° to 300°F (-54° to 149°C)	< 20 min.	24	1ml pipette	00-051115-31541-1	62-3493-0150-7
							10ml	00-048011-62601-7	62-3493-1050-8
				50ml btl			00-048011-62602-4	62-3493-5050-4	
				250ml btl			00-048011-62603-1	62-3493-3950-7	
TL42	Nutlock – Medium strength, general purpose (HTR <sup>1</sup> )	Blue	1200	1ml pipette			00-048011-62604-8	62-3494-0150-5	
				10ml btl			00-048011-62605-5	62-3494-1050-6	
				50ml btl			00-048011-62606-2	62-3494-5050-2	
				250ml btl			00-048011-62607-9	62-3494-3950-5	
				1 ltr btl			00-051115-25124-5	62-3494-8330-5	
TL43	Oil tolerant, medium strength general purpose (HTR <sup>1</sup> )	Blue	3300	10ml btl	00-051115-25138-2	62-3428-1050-4			
				50ml btl	00-051115-25139-9	62-3428-5050-0			
				250ml btl	00-051115-25140-5	62-3428-3950-3			
				1 ltr	00-051115-25141-2	62-3428-8330-3			
TL62	Studlock – High strength with controlled torque tension (HHR <sup>2</sup> )	Red	1600	10ml btl	00-048011-62609-3	62-3495-1050-3			
				50ml btl	00-048011-62610-9	62-3495-5050-9			
				250ml btl	00-048011-62611-6	62-3495-3950-2			
				1 ltr btl	00-051115-25132-0	62-3495-8330-2			
TL71	Permanent studlock for bolts and studs up to 1" (25mm) (HHR <sup>2</sup> )	Red	500	1ml pipette	00-051115-25125-2	62-3496-0150-0			
				10ml btl	00-048011-62612-3	62-3496-1050-1			
				50ml btl	00-048011-62613-0	62-3496-5050-7			
				250ml btl	00-048011-62614-7	62-3496-3950-0			
				1 ltr	00-051115-25126-9	62-3496-8330-0			
TL72	High temperature studlock with gap filling for larger diameter coarse threaded parts (HHR <sup>2</sup> )	Red	7000	-65° to 450°F (-54° to 232°C)	10ml btl	00-051115-25133-7	62-3497-1050-9		
					50ml btl	00-051115-25137-5	62-3497-5050-5		
					250ml btl	00-051115-25135-1	62-3497-3950-8		
					1 ltr btl	00-051115-25136-8	62-3497-8330-8		
TL77	Heavy duty permanent for fasteners up to 1.5" (38mm) with coarse threads (HHR <sup>2</sup> )	Red	7000	-65° to 300°F (-54° to 149°C)	10ml btl	00-051115-25142-9	62-3429-1050-2		
					50ml btl	00-051115-25143-6	62-3429-5050-8		
					250ml btl	00-051115-25144-3	62-3429-3950-1		
					1 ltr btl	00-051115-25145-0	62-3429-8330-1		
TL90	Penetrating adhesive for pre-assembled fasteners and porosity sealing of welds (HHR <sup>2</sup> )	Green	20	-65° to 300°F (-54° to 149°C)	10ml btl	00-048011-62615-4	62-3498-1050-7		
					50ml btl	00-048011-62616-1	62-3498-5050-3		
					250ml btl	00-048011-62617-8	62-3498-3950-6		
					1 ltr btl	00-051115-25150-4	62-3498-8330-6		

<sup>1</sup> Hand tool for removal    <sup>2</sup> Heat and hand tool for removal

Note: The technical information and data on these pages should be considered representative or typical only and should not be used for specification purposes.

## Pipe Sealant Anaerobic Adhesives

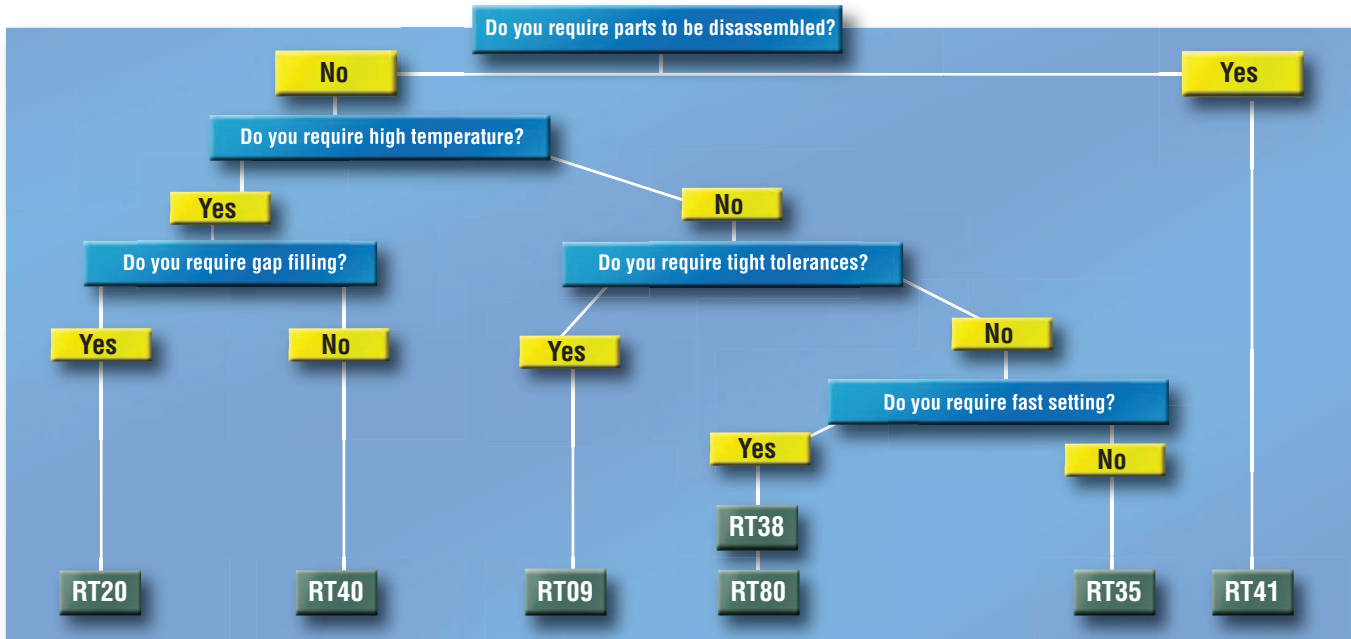


Product	Typical Use	Color	Typical Viscosity (cps)	Temperature Range	Time to Handling	Full Cure (hours)	Size	UPC	Stock #	
HP45	High pressure sealant for all hydraulic and pneumatic fittings; will not clog valve or filters	Purple	14,000	-65° to 300°F (-54° to 149°C)	4 hours	24 hours	50ml btl 250ml btl	00-048011-62721-2 00-048011-62722-9	62-3477-5050-7 62-3477-3950-0	
HP54	Refrigerant sealant with excellent chemical resistance	Red	2500		4 hours		50ml btl 250ml btl	00-048011-62627-7 00-048011-62628-4	62-3487-5050-6 62-3487-3950-9	
HP69	High pressure sealant for all fine threaded hydraulic and pneumatic fittings	Brown	500		10-25 min		50ml btl	00-048011-62725-0	62-3488-5050-4	
PS65	General purpose for applications requiring easy disassembly	White	Paste		2 hours		50ml tube 250ml tube 1 ltr btl	00-048011-62711-3 00-048011-62712-0 00-048011-62713-7	62-3701-5050-0 62-3701-3950-3 62-3701-8350-1	
PS67	Fast curing paste sealant for inactive surfaces such as stainless steel	White	Paste		-65° to 400°F (-54° to 204°C)		15-30 min	50ml tube 250ml tube 1 ltr btl	00-048011-62714-4 00-048011-62715-1 00-048011-62716-8	62-3478-5050-5 62-3478-3950-8 62-3478-8350-6
PS92	High temperature for sealing tapered and parallel threaded components	White	Paste		10-30 min		50ml tube 250ml tube	00-048011-62717-5 00-048011-62718-2	62-3479-5050-3 62-3479-3950-6	

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# Product Selection

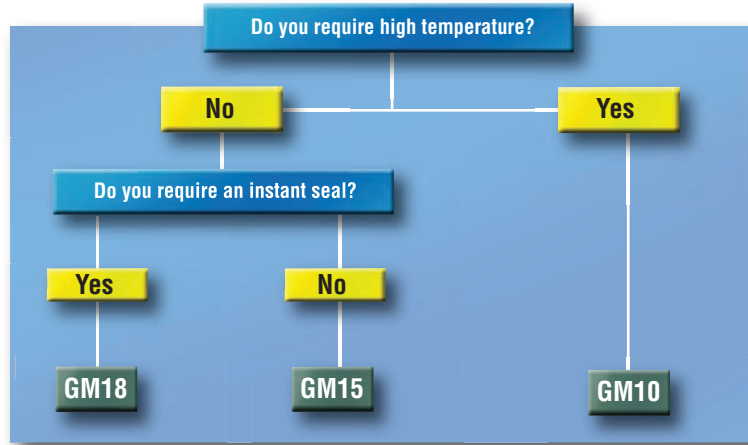
## Retaining Compound Anaerobic Adhesives



Product	Typical Use	Color	Typical Viscosity (cps)	Temperature Range	Time to Handling	Full Cure (hours)	Size	UPC	Stock #
RT09	For tight tolerances and press fit augmentation	Green	125	-65° to 300°F (-54° to 149°C)	10-30 min.	24	10ml btl 50ml btl 250ml btl 1 ltr btl	00-048011-62661-1 00-048011-62662-8 00-048011-62663-5 00-051115-31977-8	62-3435-1050-9 62-3435-5050-5 62-3435-3950-8 62-3435-8350-6
RT20	For assembly of automotive/marine cylinder liners and heat exchanger tubes	Green	7000	-65° to 450°F (-54° to 232°C)	30-40 min.		10ml btl 50ml btl 250ml btl	00-048011-62664-2 00-048011-62665-9 00-048011-62666-6	62-3434-1050-2 62-3494-5050-8 62-3434-3950-1
RT35	High strength for slip fits	Green	2000	-65° to 300°F (-54° to 149°C)	10-60 min.		10ml btl 50ml btl 250ml btl	00-048011-62667-3 00-048011-62668-0 00-048011-62669-7	62-3444-1050-1 62-3444-5050-7 62-3444-3950-0
RT38	Fast setting, high strength for bearings, bushings, or sleeves on shafts or in housings	Green	2500	-65° to 300°F (-54° to 149°C)	10-15 min.		50ml btl 250ml btl	00-051115-32042-2 00-051115-32043-9	62-3452-5050-0 62-3452-3950-3
RT40	Secures all types and sizes of bearings, shafts and cylindrical parts	Green	600	-65° to 300°F (-54° to 149°C)	10-15 min.		50ml btl 250ml btl	00-051115-25734-6 00-051115-25735-3	62-3442-5050-1 62-3442-3950-4
RT41	Medium strength for disassembly for service and bearing re-use	Tan	600	-65° to 300°F (-54° to 149°C)	15-20 min.		250ml btl	00-048011-62724-3	62-3484-3950-6
RT80	High strength, high viscosity to bond rigid assemblies	Green	1600		5-15 min.		10ml btl 50ml btl 250ml btl 1 ltr btl	00-048011-62672-7 00-048011-62673-4 00-048011-62674-1 00-048011-62675-8	62-3437-1050-5 62-3437-5050-1 62-3437-3950-4 62-3437-8350-2

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## Gasket Maker Anaerobic Adhesives



Product	Typical Use	Color	Typical Viscosity (cps)	Temperature Range	Time to Handling	Full Cure (hours)	Size	UPC	Stock #
GM10	Masking or dressing gaskets in rigid assemblies; can be screen printed; high temperature resistance	Red	Paste	-65° to 400°F (-54° to 204°C)	4-24 hours (30 min-4 hrs)	24 hours	50ml tube	00-048011-62652-9	62-3453-5050-8
GM15	General purpose; flexible to withstand vibration	Purple	Paste	-65° to 300°F (-54° to 149°C)	1-12 hours (15 min-2 hrs)	24 hours	50ml tube 250ml tube 300ml cart	00-048011-62655-0 00-048011-62656-7 00-048011-62657-4	62-3455-5050-3 62-3455-3950-6 62-3455-3450-7
GM18	Instant flexible seal without a primer on mating aluminum flanges	Red	Paste	-65° to 300°F (-54° to 149°C)	4-24 hours (30 min-4 hrs)	24 hours	300 gram cart 50ml tube	00-048011-62660-4 00-048011-62658-1	62-3454-3450-0 62-3454-5050-6

Note: The technical information and data should be considered representative only and should not be used for specification purposes.

## Anaerobic Adhesives Activators

Product	Typical Use	Size	UPC	Stock #
AC649	Acetone-based green primer for inactive or very cold surfaces; 30 day part life for pre-application, California compliant	2 fl oz btl 1 gallon 8 oz btl	00-048011-62708-3 00-048011-62707-6 00-048011-62709-0	62-3918-0850-8 62-3918-7550-7 62-3918-3750-7
3989	Aerosol can version of AC649	4.5 oz	00-048011-57395-3	62-3989-2030-6

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# Solutions Seminar

On-site or online – practical information and tools to improve your Product, Performance & Process

3M Solutions Seminars are available without cost to engineers and managers working in the real world of competition and profitability.

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- Steadily growing demand for use of lighter weight materials and less expensive LSE plastics
- The “Greening” of product life cycles expanding as a priority for manufacturers and suppliers
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- New products and application methods multiplying into a potential overload of choices

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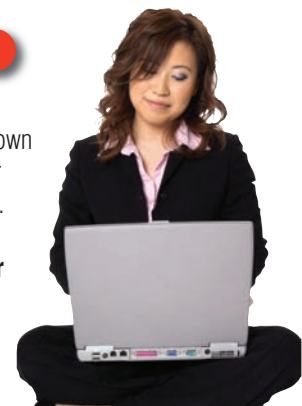
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