

Permabond® Anaerobics

The Permabond range of anaerobic adhesives is formulated to provide superior performance benefits in applications with self-supporting or closely-mating metallic components such as retaining bearings, threadlocking, flange sealing, gasketing, and pipe sealing.

How do Permabond anaerobic adhesives work?

Permabond anaerobic adhesive formulations are designed to cure when air is absent and metal surfaces (both ferrous and non-ferrous) are present. The liquid adhesive fills imperfections in the metal surfaces and gaps between the mated parts. The adhesive then rapidly cures to an inert acrylic adhesive/sealant creating a solid 100% mechanical surface-to-surface contact and physical lock.

Retaining Compounds:

- Enhanced torque resistance over mechanical joining.
- 5 times greater load carrying capacity than mechanical jointing methods.
- Greater design freedom through possibility of joining dissimilar materials.
- Protection against corrosion.
- Reduced machining tolerances in part design.
- 100% surface-to-surface contact, thus improving strength and vibration resistance.

Threadlockers:

- Fast cure speeds for quick pressure testing.
- Dismantleable and permanent threadlocking that increases project versatility.
- 100% leak-free seal, even with mis-threaded fittings.
- Protection against corrosion.
- Wicking sealants to penetrate tight fitting or pre-assembled parts.



Thread Sealants

- PTFE based formulations for durable, long-term sealing.
- Inert cured material; resistant to acids, solvents and glycol based products.
- Multiple viscosities; to seal both fine and coarse threads.
- Fast cure speeds for quick pressure testing; instantly sealing to 1000psi (70bar).
- Dismantleable and permanent thread sealants that increase project versatility.
- 100% leak-free pipe sealing even with mis-threaded pipes.
- Final cure strength that exceeds that of most pipe materials.

Gasket Materials - Form in Place Gaskets

- Fast cure and high strength that eliminates flange re-tightening.
- A full range of viscosities for various gap-filling requirements.
- Fast cure speeds for quick pressure testing
- High-temperature resistant products available.
- Dismantleable and permanent gasketing grades, expanding project versatility.
- Excellent flexural and vibration tolerance with no loss in seal integrity.

Benefits

- Liquid adhesive provides greater surface-to-surface contact than mechanical fasteners.
- Quick curing without air; accelerates assembly rates.
- Resistant to oils, solvents and other surface treatments.
- Available in permanent and removable formulations.
- Superior bond strength; often exceeds that of substrate material.
- Wide temperature range; from 55 to 230°C (-65 to 445°F)
- Gap fill capability from interference fits up to 0.5mm (0.02").
- Seals, bonds and locks with one product.

Permabond[®]
Engineering Adhesives

	Grade	Colour	Visc. mPa.s = cP	Maximum Gap Fill (mm) in	Set time, Steel mins	Shear Strength, Steel (N/mm ²) psi	Torque, M10 Steel nuts and bolts		Service Temp. (°C) °F	Availability
							Breakaway (N.m) in.lb	Prevail (N.m) in.lb		
<i>Threadlockers</i>	A011	Red	500	(0.12) 0.005	15	(5) 750	(4) 35	(5) 40	(-55 to 150) -65 to 300	Europe, Middle East & Australia
	A1042	Blue	2rpm: 8,000 20rpm: 1,700	(0.12) 0.005	5	(12) 1700	(16) 140	(8) 70	(-55 to 150) -65 to 300	Europe, Middle East & Australia
	A113	Blue	500	(0.12) 0.005	15	(12) 1700	(12) 105	(7) 60	(-55 to 150) -65 to 300	Europe, Middle East & Australia
	A130	Blue	2rpm: 8,000 20rpm: 1,800	(0.12) 0.005	15	(12) 1700	(12) 105	(7) 60	(-55 to 150) -65 to 300	Europe, Middle East & Australia
	HH120	Red	7,000	(0.25) 0.01	10	(17) 2500	(31) 275	(34) 300	(-55 to 150) -65 to 300	Americas & Asia
	HH131	Red	2rpm: 23,000 20rpm: 7,500	(0.3) 0.012	15	(17) 2500	(27) 240	(54) 480	(-55 to 230) -65 to 445	Worldwide
	HL126	Green	10-30	(0.05) 0.001	15	(15) 2200	(14) 125	(34) 300	(-55 to 150) -65 to 300	Americas & Asia
	HM118	Red	1,800	(0.2) 0.008	10	(17) 2500	(23) 200	(32) 280	(-55 to 150) -65 to 300	Americas & Asia
	HM128	Red	500	(0.15) 0.006	15	(17) 2500	(31) 275	(40) 350	(-55 to 150) -65 to 300	Americas & Asia
	HM129	Red	500	(0.15) 0.006	10	(17) 2500	(33) 290	(58) 520	(-55 to 150) -65 to 300	Worldwide
	LM113	Purple	1,200	(0.15) 0.006	15	(5) 750	(9) 80	(5) 40	(-55 to 150) -65 to 300	Americas & Asia
	MM115	Blue	1,300	(0.15) 0.006	10	(10) 1450	(16) 140	(7) 60	(-55 to 150) -65 to 300	Americas & Asia
MM115 Pure	Colorless	1,300	(0.15) 0.006	10	(10) 1450	(16) 140	(7) 60	(-55 to 150) -65 to 300	Americas & Asia	
<i>Retaining Compounds</i>	A025	Orange	750	(0.2) 0.008	15-30	(8) 1200	(13) 115	(23) 200	(-55 to 150) -65 to 300	Europe, Middle East & Australia
	A1046	Green	2rpm: 9,000 20rpm: 2,500	(0.25) 0.01	5-10	(25) 3600	(30) 270	(50) 450	(-55 to 150) -65 to 300	Europe, Middle East & Australia
	A118	Green	400	(0.12) 0.005	15	(21) 3000	(15) 130	(35) 310	(-55 to 150) -65 to 300	Europe, Middle East & Australia
	A126	Green	10-30	(0.05) 0.001	15	(15) 2200	(14) 125	(34) 300	(-55 to 150) -65 to 300	Europe, Middle East & Australia
	A134	Green	2rpm: 70,000 20rpm: 8,000	(0.5) 0.02	15	(21) 3000	(30) 270	(50) 450	(-55 to 150) -65 to 300	Europe, Middle East & Australia
	F200	Brown	150	(0.1) 0.004	10-25	(30) 4400	(28) 250	(30) 260	(-55 to 100) -65 to 215	Europe, Middle East & Australia
	F201	Brown	2rpm: 9,000 20rpm: 2,500	(0.2) 0.008	15	(30) 4400	(28) 250	(30) 260	(-55 to 100) -65 to 215	Europe, Middle East & Australia
	F202	Brown	2rpm: 135,000 20rpm: 20,000	(0.5) 0.02	15	(30) 4400	(28) 250	(30) 260	(-55 to 100) -65 to 215	Europe, Middle East & Australia
	HH040	Green	5,000	(0.25) 0.01	15	(14) 2000	(25) 220	(37) 330	(-55 to 150) -65 to 300	Americas & Asia
	HH040 Pure	Colorless	5,000	(0.25) 0.01	15	(14) 2000	(25) 220	(37) 330	(-55 to 150) -65 to 300	Americas & Asia
	HH167	Silver	2rpm: 500,000 20rpm: 90,000	(0.5) 0.02	15	(32) 4700	(32) 280	(45) 400	(-55 to 150) -65 to 300	Worldwide
	HL138	Green	225	(0.127) 0.005	10	(16) 2300	(20) 180	(36) 315	(-55 to 150) -65 to 300	Americas & Asia
	HM135	Green	700	(0.2) 0.008	5-10	(30) 4400	(31) 280	(50) 450	(-55 to 200) -65 to 390	Europe, Middle East & Australia
	HM160	Green	600	(0.2) 0.008	15	(14) 2000	(30) 270	(50) 450	(-55 to 177) -65 to 350	Americas & Asia
	HM161	Green	2,000	(0.25) 0.01	10	(24) 3500	(31) 275	(45) 400	(-55 to 177) -65 to 350	Americas & Asia
HM162	Green	1,000	(0.2) 0.008	5	(30) 4400	(32) 280	(57) 510	(-55 to 200) -65 to 390	Worldwide	
HM163	Green	3,500	(0.2) 0.08	5	(28) 4000	(30) 260	(55) 480	(-55 to 150) -65 to 300	Europe, Middle East & Australia	
HM165	Green	2rpm: 25,000 20rpm: 10,000	(0.3) 0.012	15-20	(20) 2900	(35) 310	(50) 450	(-55 to 230) -65 to 445	Worldwide	

	Grade	Colour	Visc. mPa.s = cP	Maximum Gap Fill (mm) in	Set time, Steel mins	Shear Strength, Steel (N/mm ²) psi	Torque, M10 Steel nuts and bolts		Service Temp. (°C) °F	Availability
							Breakaway (N.m) in.lb	Prevail (N.m) in.lb		
Thread Sealants	A1044	White	2rpm: 70,000 20rpm: 9,000	(0.5) 0.02	15	(17) 2500	(20) 180	(10) 90	(-55 to 150) -65 to 300	Europe, Middle East & Australia
	A1058	White	300,000	(0.5) 0.02	90	(8) 1200	(8) 70	6 (50)	(-55 to 150) -65 to 300	Europe, Middle East & Australia
	A129	Orange	2rpm: 65,000 20rpm: 20,000	(0.5) 0.02	15	(12) 1700	(12) 105	(7) 60	(-55 to 150) -65 to 300	Europe, Middle East & Australia
	A131	White	2rpm: 40,000 20rpm: 6,000	(0.5) 0.02	45	(6) 870	(10) 90	(7) 60	(-55 to 150) -65 to 300	Europe, Middle East & Australia
	LH050	White	250,000	(0.5) 0.02	120	(7) 1000	(4) 35	(3) 25	(-55 to 177) -65 to 350	Americas & Asia
	LH050 Pure	White	250,000	(0.5) 0.02	120	(7) 1000	(4) 35	(3) 25	(-55 to 177) -65 to 350	Americas & Asia
	LH051	White	2rpm: 450,000 20rpm: 20,000	(0.5) 0.02	120	(7) 1000	(4) 35	(3) 25	(-55 to 177) -65 to 350	Americas & Asia
	LH150	White	260,000	(0.5) 0.02	120	(7) 1000	(6) 50	(3) 25	(-55 to 177) -65 to 350	Americas & Asia
	LM012	Brown	2,000	(0.2) 0.008	30	(5) 750	(3) 25	(2) 15	(-55 to 177) -65 to 350	Americas & Asia
	MH052	Yellow	2rpm: 65,000 20rpm: 25,000	(0.5) 0.02	15	(10) 1400	(20) 180	(11) 100	(-55 to 150) -65 to 300	Worldwide
Gasketmakers	A136	Red	2rpm: 75,000 20rpm: 18,000	(0.5) 0.02	45	(12) 1700	N/A	N/A	(-55 to 150) -65 to 300	Europe, Middle East & Australia
	HH190	Purple	300,000	(0.6) 0.025	15	(6) 900	(10) 90	(6) 50	(-55 to 121) -65 to 250	Americas & Asia
	LH197	Green	2rpm: 50,000 20rpm: 2500	(0.3) 0.012	20	(5) 750	(10) 90	(5) 45	(-55 to 150) -65 to 300	Worldwide
	MH196	Red	2rpm: 500,000 20rpm: 100,000	(0.5) 0.02	15	(10) 1450	(20) 175	(23) 200	(-55 to 200) -65 to 390	Worldwide
	MH199	Red	2rpm: 225,000 20rpm: 75,000	(0.5) 0.02	20	(8) 1100	(20) 175	(12) 100	(-55 to 200) -65 to 390	Worldwide
Activators	A905	Green	2	N/A	N/A	N/A	N/A	N/A	N/A	Europe, Middle East & Australia
	ASC10	Green	2	N/A	N/A	N/A	N/A	N/A	N/A	Americas & Asia

Permabond Worldwide

Wherever your manufacturing or R&D site may be located, Permabond representatives can be called upon to assist you. We have an extensive network of professional distributors worldwide.



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