

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.

	Grade	Colour	Visc. mPa.s = cP	Maximum Gap Fill (mm) in	Set time, Steel mins	Shear Strength, Steel (N/mm2) psi	Torque, M10 Steel nuts and bolts		Service Temp. (°C) °F	Availability
							Breakaway (N.m) in.lb	Prevail (N.m) in.lb		
Threadlockers	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: 8000 20rpm: 1700	(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: 8000 20rpm: 1800	(0.12) 0.005	15	(12) 1700	(12) 105	(7) 60	(-55 to 150) -65 to 300	Europe, Middle East & Australia
	HH120	Red	7000	(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: 7500	(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
	HMI18	Red	1800	(0.2) 0.008	10	(17) 2500	(23) 200	(32) 280	(-55 to 150) -65 to 300	Americas & Asia
	HMI28	Red	500	(0.15) 0.006	15	(17) 2500	(31) 275	(40) 350	(-55 to 150) -65 to 300	Americas & Asia
	HMI29	Red	500	(0.15) 0.006	10	(17) 2500	(33) 290	(58) 520	(-55 to 150) -65 to 300	Worldwide
	LM113	Purple	1200	(0.15) 0.006	15	(5) 750	(9) 80	(5) 40	(-55 to 150) -65 to 300	Americas & Asia
	MM115	Blue	1300	(0.15) 0.006	10	(10) 1450	(16) 140	(7) 60	(-55 to 150) -65 to 300	Americas & Asia
MM115 Pure	Colorless	1300	(0.15) 0.006	10	(10) 1450	(16) 140	(7) 60	(-55 to 150) -65 to 300	Americas & Asia	
Retaining Compounds	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: 9000 20rpm: 2500	(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: 8000	(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: 9000 20rpm: 2500	(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	5000	(0.25) 0.01	15	(14) 2000	(25) 220	(37) 330	(-55 to 150) -65 to 300	Americas & Asia
	HH040 Pure	Colorless	5000	(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
	HMI35	Green	700	(0.2) 0.008	5-10	(30) 4400	(31) 280	(50) 450	(-55 to 200) -65 to 390	Europe, Middle East & Australia
	HMI60	Green	600	(0.2) 0.008	15	(14) 2000	(30) 270	(50) 450	(-55 to 177) -65 to 350	Americas & Asia
	HMI61	Green	2000	(0.25) 0.01	10	(24) 3500	(31) 275	(45) 400	(-55 to 177) -65 to 350	Americas & Asia
	HMI62	Green	1000	(0.2) 0.008	5	(30) 4400	(32) 280	(57) 510	(-55 to 200) -65 to 390	Worldwide
HMI63	Green	3500	(0.2) 0.08	5	(28) 4000	(30) 260	(55) 480	(-55 to 150) -65 to 300	Europe, Middle East & Australia	
HMI65	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: 9000	(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: 6000	(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	2000	(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® Technologies

Anaerobics

Thread lockers, Thread sealants, FIP Gasketmakers, Retaining Compounds

Cyanoacrylates

Instant adhesives, for rapid bonding of metals, plastics, rubber, and more.

Epoxies

Two-part (ET), Single-part (ES), and Modified Technology (MT) grades are available.

MS-Polymers

Single-part, moisture-curing, flexible sealants

Polyurethanes

Two-part room temperature curing adhesives

Toughened Acrylics

Rapid curing, high strength structural adhesives

UV Light Cured Adhesives

For glass, plastic, and metal with dual cure options.



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