

Flexible Adhesives

Modified Epoxies (MT)

Permabond Modified Epoxies are two component hybrid technology adhesives that cure at ambient temperature. Products are available in 10:1 and 2:1 dual cartridges for dispensing through static mix tips. The range includes fast-setting products as well as slow curing grades to suit production line requirements.

MS Polymers (MS)

Permabond MS Polymers are single component, hybrid technology adhesives that moisture cure at ambient temperature. The high elongation and flexible nature of these strong bonds meet the demands of stress from impact, peel and expansion that can occur when bonding dissimilar materials. They have excellent environmental resistance and remain very flexible.

Benefits of Permabond MS Polymers and Modified Epoxies include:

- *Paintable*
- *Non-corrosive*
- *Fast Tack Free Time*
- *Adhesion to a Variety of Substrates*
- *No primer needed*
- *Weather Resistant - No Cracking or Splitting*
- *Ease of Application - Use in Most Weather Conditions*



Description	Product	Appearance	Viscosity cP (mPa.s)	Cure Mechanism	Elongation	Hardness
Single component MS Polymers. Very soft and flexible, low shrinkage, and low read through. Ideal for exterior applications. Cure rate is approximate depending on humidity, temperature and depth.	MS359 Grey	Grey	Non-Sag	Single component, 15 min skin over time Cure rate 5mm / 24 hrs	250%	50 Shore A
	MS359 A Grey	Grey	Self-Levelling	Single component, 15 min skin over time Cure rate 3-4mm / 24 hrs	135%	45 Shore A
	MS359 Clear	Transparent	Non-Sag	Single component, 15 min skin over time Cure rate 4mm / 24 hrs	90%	45 Shore A
Two component Modified Epoxies. Soft and flexible with low shrinkage and low read through. Excellent potting compound for sensitive electronic components, low shrinkage provides less stress on sensitive components. Faster set time than MS Polymers	MT382	Charcoal Black	Self-Levelling	2:1 mix ratio, 20- 50 min pot life Handling Strength ≤ 2 hrs	175%	70 Shore A
	MT3821	Black	Thixotropic Paste	2:1 mix ratio, 10-20 min pot life Handling Strength ≤ 90 mins	125%	70 Shore A
	MT3809	Black	Self-Levelling	10:1 mix ratio, 10-12 min pot life Handling Strength ≤ 30 mins	150%	80 Shore A



Polyurethane Adhesives

Benefits of Permabond Polyurethanes include:

- *Various Set Times*
- *Adhesion to a Variety of Substrates*
- *No primer needed*
- *Good Tensile Strength*
- *Ease of Application*
- *Resilient Bonds*



Polyurethane - Two Component

Grade	PT321	PT326	PT328
Description	Fast, Strong	Moderate Pot Life	Extended Pot Life
Color Part A	Black	Black	Black
Color Part B	Cream	Cream	Cream
Viscosity Part A cP (mPa.s)	4,000-8,000	4,000-8,000	4,000-8,000
Viscosity Part B cP (mPa.s)	3,000-6,000	3,000-6,000	3,000-6,000
Specific Gravity Part A	1.25	1.25	1.25
Specific Gravity Part B	1.45	1.45	1.45
Mix Ratio	1:1	1:1	1:1
Bond Gap Fill	0.2 in. (5mm)	0.2 in. (5mm)	0.2 in. (5mm)
Pot Life	1 - 1.5 min	4 - 7 min	15 - 20 min
Handling Strength	10 - 15 min	60 - 90 min	90 - 120 min
Full Strength cured @ 23°C	24 hours	4-5 days	4-5 days
Full Strength cured @ 90°C	30 min	30 min	30 min
Hardness	D 70 - 80	D 65 - 75	D 60 - 75
Elongation	<10%	<15%	<20%
Shear Strength Grit Steel	2,600-3,600 psi (18 - 25 N/mm ²)	1,700-2,900 psi (12 - 20 N/mm ²)	1,700-2,600 psi (12 - 18 N/mm ²)
Tensile Strength	2,900-3,600 psi (20 - 25 N/mm ²)	2,300-3,600 psi (16 - 25 N/mm ²)	2,200-2,900 psi (15 - 25 N/mm ²)
Temperature Range	-40 to 248 °F (-40 to +120 °C)	-40 to 248 °F (-40 to +120 °C)	-40 to 248 °F (-40 to +120 °C)