



PRO-SET[®]

LAMINATING
EPOXY

ADHESIVES

PROCESS
EQUIPMENT

Technical Data

M1004 Resin/M2004 Hardener Epoxy Barrier Coat

M1004 Resin and M2004 Hardener are formulated to create an abrasion and chemical resistant epoxy coating system. This high solids, low VOC mixture can be applied directly over steel, concrete or composite materials.

SURFACE PREPARATION

Surfaces should be clean and free of contaminants and laitance. Sandblast or abrade concrete, masonry and stone surfaces if possible. Sand composite surfaces. Vacuum or clean with compressed air to remove dust before applying. Surfaces should be free of standing water.

MIXING

Stir container contents to an even consistency before metering. Meter resin / hardener accurately and mix thoroughly. Mix for 2 minutes, scraping the bottom and sides of the mixing container. Mix until a uniform gray color. If using a high shear mixing blade, mix at low rpm. These products are shear thinning, so over shearing will cause significant viscosity reduction.

CURING

The cure rate of epoxy products is affected by mass and temperature. A minimum cure of 5 days at 72° F is required before service exposure in potable water applications. Elevated temperatures reduce the required cure times. Cooler temperatures require longer cure times. Minimum application temperature is 50°F.

APPLICATION

Once mixed, transfer from the mixing container to application equipment. The coating can be applied by manual or pressure fed roller. Two 10 to 12 mil coats are recommended.

SHELF LIFE

These products should be used within **12 months** of their date of manufacture. Refer to the product label for a lot number. This 6-digit Lot Number represents a date of manufacture in the format MMDDYY.

We recommend testing any product using proposed materials and procedures to confirm working and curing characteristics under expected application conditions.

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M1004/M2004

HANDLING CHARACTERISTICS *(Not for specification purposes)*

Property	M1004 Resin	M2004 Hardener	Mixed
Density	8.94 lb/gal	8.15 lb/gal	8.94 lb/gal
Density	1.07g/ml	0.98g/ml	1.07 g/ml
Viscosity	30,000cps	250 cps	2825 cps

Mix Ratio (M1004:M2004)

by weight	100:27.00
by volume	100:29.60

Pot Life (ASTM D-2427-71)

100g

@72°F 65 min.

Coverage / Mixed Gallon

@ 12 mils wet 160 square feet

Thin Film Gel (12 mil coat)

@55°F	12 Hr
@72°F	4.5 Hr.
@85°F	3 Hr.

Overcoat Time

Min.

Max.

@55°F	12 Hr.	48 Hr.
@72°F	4 Hr.	36 Hr.
@85°F	2.5 Hr.	24 Hr.

PHYSICAL PROPERTIES

Hardness (Shore D)	ASTM D-2240	62
Compression Strength (psi)	ASTM D-695	3,334
Izod Impact (Ft-lb/in)	ASTM D-256	0.16
Heat Deflection Temperature (°F)	ASTM D-648	117

Tabor Abrasion

ASTM D-3884-92

H-22 wheel, 2000g load, 1000 cycles 4.3%

Chemically Resistant to :

- Water
- Sodium chloride (NaCl 10% aq)
- Sodium hydroxide (NaOH 10% aq)
- Sodium hypochlorite (NaOCl 1.1% aq)
- Muriatic acid (HCl 30% aq)
- Ammonia (NH3 10% aq)

All data based on 2 week cure at 72°F.