



product
information

7M60-10
EPOXY MARINE PRIMER

Cardinal's 7M60-10 is a two-component high build epoxy marine primer. 7M60-10 epoxy primer is well suited for metal surfaces that require weather, corrosion and chemical resistance applications are required.

TYPICAL USES:

- Marine
- Utility trailers
- Heavy duty equipment

BENEFITS:

- Low V.O.C.
- Free of heavy metals
- Excellent chemical and solvent resistance

CURED FILM PROPERTIES:

Testing conducted on 7M60-10 semi gloss white, catalyzed with 7MEH-01 at 1.5 mils DFT (Dry Film Thickness) over 20 gauge Bonderite 1000® test panel cured 30 minutes at 180°F and then topcoated with 6M09-10 air dried 14 days.

TEST	METHOD	PARAMETERS	RESULT
Adhesion	ASTM D3359	Cross-hatch tape	0% failure
Hardness	ASTM D3363	Pencil	F- H
Salt Spray	ASTM B117	1000 hrs 95°, 5% salt solution	Less than 3/16" creep - along scribe, otherwise, no effect
Solvent Resistance	ASTM D4752	MEK 50 rubs IPA 100 rubs	No effect No effect

Cure: Air Dry – ambient air temperature @ 78° F

catalyst	print free	dry to handle	full cure	recoat
7MEH-01	45 min	2 hrs	7 days	2 hours - 2 weeks

**No Force Curing
Prior to Topcoat**

**FOR INDUSTRIAL USE ONLY
NOT FOR RESIDENTIAL USE**

TYPE: Epoxy.

COMPONENTS: Two.

COLORS: White

GLOSS: 45 - 55° @ 60 ∠

COVERAGE: At 1.0 mil DFT, 65% transfer efficiency(TE)

Mixed paint, 2.8 lbs/gal : 475 ft²/gal.

Calculation: 1604 ft²/gal x % volume solids x TE ÷ DFT

VOC MIXED: 335 grams/liter = 2.79 lbs/gal Excluding

217 grams/liter = 1.81 lbs/gal Including

See mix ratio table below.

VOLUME SOLIDS:

7M60-10 31%

7MEH-01..... 68%

Mixed to 2.8 lbs/gal 38%

FLASH POINT:

7M60-10	method
24° F	TCC

SHELF LIFE: 1 year from date of manufacture in factory sealed container.

APPLICATION: After preparing the surface, thoroughly mix component 1 before adding catalyst. Mix only the amount of material needed. The base to catalyst proportion must be measured accurately, by volume only, to obtain optimum film properties. Do not use reducers that contain water or alcohol; these react with the catalyst and can cause a variety of problems. Be aware of spray-able pot life. Brushing, rolling and dipping are not recommended.

MIX RATIOS: Two components must be mixed properly to obtain coating performance. Thinning depends on applicator's regulatory VOC limits.

Mix	parts by volume
7M60-10	3 parts
7MEH-01	1 part
solvent	N/A
VOC =	2.8 lbs/gal

Viscosity: 15"-20" #3 Zahn range.

SPRAY-able Pot Life: 3 hrs. at 2.8 lbs. VOC/gal

RECOMMENDED DFT: 2.0 – 3.0 mils

(Continued on page 2)

SURFACE PREPARATION AND PRIMING: The most important steps in a successful coating process are cleaning, pretreatment and priming. The following is a brief outline of some basics for unpainted substrates. It is not intended to be all-inclusive. For more information on your particular application contact Cardinal.

Cleaning the substrate: All surfaces to be coated, must be free of dirt, grease, oil, oxidation, mill scale, and all other contaminants. The surface must be thoroughly dry before painting. Air quality regulations have limited the allowable emissions from cleaning operations.

Steel — A phosphate chemical conversion coating is highly recommended. When this is not possible, a vinyl acid wash pretreatment primer is recommended such as Cardinal's 4M60 series primers. UL approval on our product requires the minimum of a three stage iron phosphate pre-treatment.

Aluminum — A chemical conversion coating is highly recommended. When this is not possible, a vinyl acid wash pretreatment primer is recommended such as Cardinal's 4M60 series primers.

Galvanized — Cardinal's W-303-A surface preparation solution helps improve adhesion followed by a vinyl acid wash pretreatment primer such as Cardinal's 4M60 series primers.

Stainless Steel — Brush-off or blast clean per SSPC-SP 7 to a uniform profile of 1.5 mils. Cardinal's W-303-A surface preparation solution can help improve adhesion followed by a vinyl acid wash pretreatment primer such as Cardinal's 4M60 series primers.

PRIMER SELECTION:

PRODUCT NO.	DESCRIPTION	FUNCTION
4M60 Series	Acid etching pre-treatment primers	Corrosion resistance, some surfacing

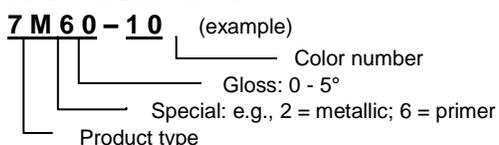
RELATED PRODUCTS:

PRODUCT NO.	DESCRIPTION / FUNCTION
HP-439	Medium Exempt Reducer.
J-3081	Surfactant. Helps eliminate blisters, bubbles, pin holes, solvent-pop.
6M00- Series	High Solids Marine Polyurethane
SM-01	Medium Reducer

TROUBLE SHOOTING:

PROBLEM	CAUSE	REMEDY
Blisters, pin holes or solvent pop	Water contamination. Entrapped air. Entrapped solvent	Eliminate water – Check air lines. Use fresh catalyst. Use urethane grade thinners. Increase atomization, decrease film build.
Craters	Contaminated ambient air, e.g., silicone mist, dust.	Locate and eliminate source of contamination.
Fish-eyes	Substrate contamination.	Clean and prepare substrate.
Not drying	Alcohol in reducer. Wrong catalyst ratio.	Use Cardinal's SM- series or urethane grade reducers only. Double check mix ratio.
Poor adhesion	Improper surface preparation.	See surface preparation section.
Gloss variation	Variation in application, cure schedule, catalyst ratio, humidity.	Consistent gloss depends upon consistent process, e.g., air dried parts will not have same gloss as force dried parts.

PRODUCT IDENTIFICATION



APPLICATION EQUIPMENT: Most air quality regulations require the paint application transfer efficiency to be 65% or better. This generally means using electrostatic or high volume low pressure (HVLP) spray guns. Otherwise, conventional pressure feed, airless or air assisted airless spray equipment can be used. Air supply lines need water and oil traps.

EQUIPMENT CLEAN-UP: Clean up should be done as soon as possible keeping in mind the pot life of the mixed paint. Avoid leaving catalyzed paint in the lines. Air quality regulations have limited the allowable emissions from cleaning operations.

PRODUCT LIMITATIONS:

- Catalyst reacts with water. Air supply should be dry. Containers should be kept tightly closed. Use urethane grade thinners only.
- Alcohols and glycols interfere with curing chemistry and should be avoided. They can be found in some lacquer thinners and certain synthetic reducers.
- Optimum film properties are dependent upon proper mixing of paint and catalyst.

SAFETY: Refer to the product's Material Safety Data Sheet (MSDS) for complete safety information. Contains organic solvents. Use with adequate ventilation. Do not breathe vapors or spray mists. If component TLVs are exceeded, a NIOSH approved air supplied respirator is advised. See MSDS for TLV information. Contents are FLAMMABLE. Keep from heat, sparks or open flame. Allergic reactions are possible. Avoid use by persons with respiratory problems. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

FIRST AID:

Eye contact: flush immediately with plenty of water for at least 15 min. and get medical attention.
Skin contact: wash thoroughly with soap and water for 5 minutes.
If swallowed, do not induce vomiting and get medical attention immediately.

