



# Dampney Protective Coatings

## Endcor® 772 Black Coal Tar Epoxy-Polyamide Coating

### Description

Endcor 772 is a two-component, polyamide cured, coal tar epoxy coating, recommended for long-term protection against corrosion under extreme conditions. High-build, non-sagging films up to 16 mils thick can be achieved with a single-coat spray application.

Endcor 772 protects steel surfaces subjected to immersion in fresh or salt water, exposure in tidal or splash zones, or burial in soil. It is effective on the interiors of tanks and lines containing brine, crude oil, petroleum products, sewage or strong alkalies. It is resistant to a wide range of chemical fumes, mists and splashes. Suitability for prolonged immersion in specific chemicals should be determined by tests prior to use.

### Uses

- Underground pipeline exteriors, interiors of crude oil and brine pipelines
- Offshore drilling structures, docks, pilings, surfaces exposed to tidal and splash zones
- Water and sewage works equipment, structural steel, piping, etc., lining digesters, clarifiers, water storage tanks, surfaces exposed to high humidity or high hydrogen sulfide levels
- Chemical processing vessels, exchangers, structural steel, tank and equipment exteriors, floating roofs, piping, tank supports, pump bases, pumps, concrete surfaces, tank linings for storage alkalies, brines, mild mineral acids
- Utility company manhole pits and hardware
- Penstocks and dam gates
- Concrete and masonry surfaces in marine and chemical environments

### Features

- Self priming-no special primer required for many applications
- Excellent adhesion to epoxy and zinc rich primers when maximum corrosion resistance required
- Chemical resistant
- Impact and abrasion resistant

- Resists soil stress in underground exposures
- High film build per coat-16mils wet film without sag
- Long pot life-4 hours minimum At 70°F
- Can be topcoated with light-colored latex paint systems
- Meets Steel Structures Painting Council Specification 16-68T for Coal Tar Epoxy-Polyamide Coating

### Primer

Priming with Endcor 750 Polyamide Epoxy Primer is recommended for maximum corrosion protection in underground or immersion service, or when adverse surface conditions are encountered. Examples are very rough surfaces (masonry or metal) and unavoidable surface moisture. Consult your Dampney representative for specific recommendations.

### Surface Preparation

Remove all grease and oil by solvent cleaning per Steel Structures Painting Council Specification SSPC-SP1, "Solvent Cleaning".

**Steel:** For non-immersion service abrasive blast according to Specification SSPC-SP6, "Commercial Blast Cleaning". For immersion service abrasive blast per Specification SSPC-SP10, "Near-White Blast Cleaning". Power tool cleaning is recommended for dressing down weld splatter and sharp edges.

**Concrete:** Surface must be clean and dry. Brush-off blast or power tool clean to roughen surface and remove loose and spalled material. Acid etching and rinsing will also provide a satisfactory surface.

### Mixing

Mixing ratio is 4 parts Base to 1 part Activator by volume. Base component has a thixotropic (gel-like) consistency and will become fluidized upon mixing. Mix Base component separately to reduce viscosity and then combine Activator component with Base component in proper ratio. Mix thoroughly, using power mixer.

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### Pot Life

Pot life varies with temperature, and decreases rapidly as temperature increases. For limitations, see chart in Technical Data section. DO NOT apply Endcor 772 that has aged beyond the time limits recommended.

### Applications

Endcor 772 may be applied by brush, roller, or conventional or airless spray methods. It is self-priming, and in most applications can be used as a complete one-coat or two-coat system. It can also be used as a topcoat for Endcor or Epodur series epoxy or zinc-rich primers.

#### Steel: For non-immersion service-

Apply one coat to a dry film thickness of 8-9 mils. For immersion or underground service-

Apply one coat Endcor 772 to a dry film thickness of 8-9 mils. Depending on temperature, allow drying time of 12 hours minimum to 96 hours maximum between coats as specified in Technical Data section. Apply second coat of Endcor 772 to a dry film thickness of 8-9 mils. Total system dry film thickness: 16-18 mils. Before placing coating system into service allow to cure fully as specified in Technical Data section.

For maximum corrosion resistance, prime surface with one coat of either Endcor 750 Polyamide-Epoxy Primer (Bulletin 750) to a dry film thickness of 1-1.5 mils. Allow primer to dry as specified in Bulletin. Apply two coats of Endcor 772 in accordance with recommendations specified above. Total system dry film thickness: 18-20 mils.

#### Concrete: For immersion or underground service-

Apply two coats of Endcor 772 in accordance with recommendations specified above. Total system dry film thickness: 16-18 mils.

**IMPORTANT:** Special surface preparation may be required to ensure good intercoat adhesion between Endcor 772 and previously applied, fully cured coats of Endcor 750 Primer and Endcor 772. Consult your Dampney representative for recommendations.

Exposure to high humidity, moisture condensation, or strong sunlight during cure time may cause formation of surface haze or blush. Before re-coating, remove this by wiping down surface with Dampney Thinner.

### Equipment

Apply only after thorough mixing. In general, addition of thinner should be avoided as this will result in reduced film thickness. During cool weather, if thinning is required to establish proper spray pattern, or to improve leveling or flow out for brush or roller application, use up to one pint maximum of Dampney 124 Thinner per gallon of coating.

**Brush:** Do not use nylon or plastic bristle brushes. Using the side of the brush, scoop Endcor 772 from the container and apply in sweeping strokes. Do not brush out to a thin line. Do not attempt to remove brush marks.

**Roller:** Use only metal-backed, mohair-type roller. Do not use plastic-type roller. Keep roller thoroughly saturated to obtain maximum film thickness. Do not squeegee coating or apply excessive pressure to roller.

#### Airless Spray Equipment

As a guide only...

Pump	Graco "Bulldog" or equivalent
Air hose to pump	3-8" I.D. High Pressure Hose
Air pressure to pump	50-90 lbs.
Spray gun	Hydra-Mastic Gun (Reverse-A-Clean recommended)
Filter	None
Tip Sized	Orifice Size Range .019"- .031" (Best general tip .025")
Pattern width	10 to 12" on relatively flat surfaces. Fan width should be varied by tip selection according to type of surface being sprayed.

#### Conventional Spray Equipment

As a guide only...

Pump	Graco "President", or equivalent
Fluid hose	½" I.D. to 50 ft.; ¾" over 50 ft.
Air hose	½" I.D.
Spray gun	Graco Heavy Material hand or pole gun
Atomizing Tip	3/16" wing external mix
Fluid Tip	1/8" to ¼"
Pot Pressure	30-60 psi
Atomizing Pressure	50-80 psi
Distance from work	8-12"

### Drying Time

Before placing coating system into immersion or underground service allow to fully cure per schedule specified in Technical Data section. Exposure to temperature below 50°F will severely retard curing time.

If coating system is to be used for tank lining, forced curing is recommended.

### Cleanup

Dismantle all equipment immediately after use. Clean dismantled parts immediately using Dampney 124 Thinner. Flush hose thoroughly with Dampney 124 Thinner. If application is stopped for more than 15 minutes, all equipment including brushes or rollers,

must be cleaned immediately with Dampney 124 Thinner.

<b>Shipping Weights</b>	<b>1 gal. Unit</b>	<b>5 gal. Unit</b>
Endcor 772	12.6 lbs.	63 lbs.
Dampney 124 Thinner	8 lbs.	43 lbs.

## **Not Recommended For**

Immersion in:

- Aromatic or ketone solvents
- Chromic acid, nitric acid
- Bleaches or oxidizing agents
- Concentrated mineral acids
- Interior of potable water storage tanks

## **Precautionary Information**

**CAUTION! FLAMMABLE! CONTAINS XYLENE, POLYAMIDE RESIN, CRYSTACCINE SILICAN AND COAL TAR. WARNING! HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. BEFORE USING, READ MATERIAL SAFETY DATA SHEET (MSDS).**

Keep away from heat, sparks, arc and flame. Avoid breathing vapors or spray mist. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation during mixing, application, and drying. Wear an appropriate, properly fitted NIOSH/MSHA certified respirator during and after application, and until work areas are exhausted of all vapors and mists. Follow respirator manufacturer's directions for respirator use. Wash thoroughly after handling. Wear rubber gloves, goggles, and protective clothing. Use skin cream.

## **Bulletin 772**

In confined areas or unventilated spaces, require constant-flow airline, hood-type respirator and use explosion proof lights and electrical equipment. Use only nonsparking tools and equipment. Wear conductive and nonsparking footwear. Make certain all electrical equipment is grounded.

### **First Aid:**

**Eye contact-**Flush immediately with plenty of water for at least 15 minutes and obtain medical attention.

**Skin contact-**Remove contaminated clothing and wash contact area thoroughly with soap and water. Wash clothing before reuse.

**Inhalation-**If affected by inhalation of vapor or spray mist, remove person to fresh air. If breathing has stopped, administer artificial respiration and obtain medical attention.

**Ingestion-**If swallowed, consult a physician at poison control center at once. Do not give anything by mouth. Do not induce vomiting; can cause pulmonary complications.

### **Spillage and Disposal:**

Keep container closed when not in use. Keep closures tight and containers upright to prevent leakage. In case of spillage, dike spill, absorb with inert cleanup material and dispose of in accordance with all applicable federal, state, and local regulations.

## **FOR INDUSTRIAL USE ONLY**

If you cannot strictly comply with these warning and instructions, do not use this product.

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### TECHNICAL DATA

Characteristics	Endcor 772		
Color	Black		
Base to activator ratio	4:1		
Application temperature	Normal	Minimum	Maximum
Ambient air	60°-90°F	50°F	120°F
Material	65°-80°F	50°F	120°F
Surface	65°-85°F	50°F	120°F
Humidity	20-75%	0	85%
Temperature resistance			
Continuous	200°F (dry)		
Intermittent	275°F (dry)		
Immersion service	125°F maximum		
% solids by volume	82		
Flash point			
Base	81°F		
Activator	490°F		
Dry film thickness per coat	8-10 mils.		
Wet film thickness per coat	10-12 mils.		
Theoretical coverage per gallon*	1280 mil. Sq. ft.		
Weight per gallon			
Base	12.5 lbs.		
Activator	9.7 lbs		
Drying time			
Set to touch	At 50°F (10°C)	At 70°F (21°C)	At 90°F (32°C)
Recoat time	16 hours	3-4 hours	2-3 hours
	4 days	24 hours	12 hours
Final cure			
Non-immersion service	4 days	2 days	1 day
Immersion service	14 days	7 days	4 days
Pot life	10 hours	4 hours	2 hours
Shelf life	1 year (unmixed components)		
Volatile Organic Content (VOC)	1.3 lbs./gal (150 g/l)		

\* **Note:** Actual coverage rate will vary depending upon material losses during mixing and application, and upon type and condition of surface to be coated. Allowances must be made for losses when estimating material requirements. See Bulletin 3110 "Calculating Coating Requirement" for additional information.

### WARRANTY

Dampney protective coating products are expressly warranted to meet applicable technical and quality specifications. The technical data contained herein are accurate at the date of issuance but are subject to change without prior notification. No warranty of current accuracy is hereby given or implied. User must contact Dampney to verify correctness before ordering. Dampney assumes no responsibility for coverage, performance or injuries resulting from handling or use and **LIABILITY, IF ANY, SHALL BE LIMITED TO PRODUCT REPLACEMENT.** In no event will Dampney be responsible for consequential damages, except insofar as mandated by law. Dampney **DISCLAIMS ALL OTHER WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**