

### UltraES ZN1086

Endura UltraES ZN1086 is a fast drying, heavy duty, high performance zinc rich primer designed to protect steel structures in severe service conditions.

#### Product Features

- ◆ Gives cathodic corrosion protection
- ◆ Contains 86% zinc in dried film
- ◆ Rapid dry properties at low temperatures and high humidity
- ◆ Extended pot-life
- ◆ Compatible with most high performance coatings

#### Shelf Life\*

Binder: (9) months  
Powder: (2) years

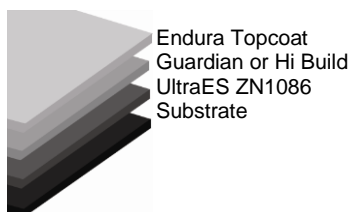
\*For unopened product.

#### Pot Life of Mixed Product:

8 Hours @ 77°F (25°C) and 50% RH

#### Limitations of Use

Do not topcoat with alkyds or alkyd-urethane coatings.



#### Suitability

Endura UltraES ZN1086 provides superior protection of steel structures found in such places as pulp and paper mills, sewage and waste treatment plant, chemical processing plants, refineries, and for bridge and tank coatings. Fast drying properties make Endura UltraES ZN1086 zinc coating ideal for use in fabrication shops.



#### Surface preparation

Commercial sandblasting or machine sanding with 40 grit sandpaper is acceptable for most applications. Sandblast media, mesh size 16/30 or 30/50 or LG50 Steel shot.



#### Mixing Ratio

1 gallon kit : 0.76 gallon base plus 0.24 gallons powder  
5 gallons kit : 3.8 gallons base plus 1.2 gallons powder

The recommended temperature when mixed is 20-25°C (68-77°F).

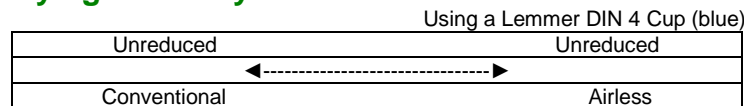
#### Environmental Conditions

For optimum coating performance product, substrate and ambient temperature should be between 20°C-25°C\* (68°F-77°F). To prevent condensation during application the surface temperature must be 3°C (5°F) or more above the dew point at all times.

\*for use outside this range please contact your Endura representative.



#### Spraying Viscosity



Thinning may not normally be required or recommended. If thinning, (<5%) use Endura approved thinner or Isopropyl Alcohol



#### Spray Gun Setup

| Feed Type          | Fluid Tip  | Application Pressures ( heel of gun ) | Fluid Delivery |
|--------------------|------------|---------------------------------------|----------------|
| Siphon Feed        | 1.6-1.8 mm | 40-50 psi                             |                |
| Gravity Feed       | 1.6-1.8 mm | 30-40 psi                             |                |
| Pressure Feed      | 1.4-1.8 mm | 50-60 psi                             | 12-16 oz/min   |
| Air Assist Airless | 31-33 Thou | 2000 psi                              |                |
| Airless            | 31-33 Thou | 2000 psi                              |                |

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#### Spray

**Conventional** : Use suitable pressure pot with mechanical agitator and dual regulators for air and fluid. Use a professional grade gun with 04Z needle/nozzle, air cap combination equipped with leather packings or equal. 50 ft. length fluid hose, minimum 1/2" ID; 50 ft length air hose, minimum 5/16" ID. Air supply minimum should be 80 psi, 25 CFM at spray nozzle. Use suitable in-line moisture traps and oil separators to provide clean dry air to pressure pot and spray gun.

**Airless** : Use at least a 33:1 ratio airless pump. Teflon/poly packings are recommended. Recirculation lines are recommended for spray zinc through airless equipment. Use a 50 ft. 3/8" diameter ID airless hose. An air assisted airless spray gun fitted with a 0.031"-0.033" heavy duty Reverse-A-Clean tip is recommended. Fluid pressure should be regulated to provide a proper spray pattern. Normally this is 2000 psi or below. Higher pressures may result in tip packing. Surface temperature for application should be 0 -120 °F.

#### Product Mixing Instructions

Ultra ES ZN1086 is supplied in a two-component kit, comprised of liquid (binder) component and a dry metal (powder) component. The powder component should be slowly added to the binder while agitating with a power mixer at low speeds. After all the powder is incorporated, mix thoroughly at higher speeds. Always filter through a wire screen (30 to 60 mesh or equivalent) before spraying to insure removal of any powdered zinc agglomerates.

#### Recommended Film Build Thickness and Cover Rate

Endura UltraES ZN1086 primer has a recommended film build thickness of 2.0 - 3.0 mils dry (75 - 125 microns).

Theoretical coverage at 1.0 mil (25microns) DFT: 992 ft<sup>2</sup> per gallon @ 100% transfer efficiency.

Dry film thicknesses in excess of 6 mils (150 microns) per coat are not recommended.

#### Drying Time\*

|           | 20°C (68°F)<br>50% RH | 30°C (86°F)<br>70% RH | 40°C (104°F)<br>90%RH |
|-----------|-----------------------|-----------------------|-----------------------|
| Topcoat   | 18 hours              | ←-----→ 8 hours       |                       |
| Full Cure | 7 Days                |                       |                       |

Product should be tested, to ensure proper curing rate, prior to topcoating.

\* Subject to ambient conditions (temperature and humidity) and good airflow. For improved scheduling please contact your Endura representative.

#### Clean Up

Endura high strength gun wash, Endura epoxy reducer or Endura EX-2C thinner.

