

Ceramic-Polymer STP-EP2 (AWWA) is a flexible surface tolerant 2 component epoxy coating providing outstanding corrosion protection to a variety of metal, fiberglass, reinforced plastic and concrete substrates. The product is 100 % VS.



APPLICATION RANGE

- Internal lining of water pipelines and tanks
- Offshore and onshore constructions



FEATURES AND BENEFITS

- Solvent-free
- High chemical resistance
- Excellent abrasion resistance
- Surface tolerance
- AWWA C210-07 water pipeline approved
- 100 % resistance against all kinds of hydrocarbons
- 100 % resistance against sea water
- High temperature resistance up to 120 °C (dependent on medium)

TECHNICAL INFORMATION

Color	grey
Surface	satın
Volume Solids	100%
VOC	0 mg
Flexibility	Excellent
Chemical resistance	Excellent
Abrasion resistance	30 mg (ASTM D 4060)
Adhesion	Excellent on steel and concrete; (>30 Mpa on carbon steel)
Specific Gravity (Mix)	1.50

APPLICATION DATA

Application methods	Hot spraying: undiluted, use special 2-component hot airless spray system, spray tip ≥ 0.53 mm (0.021 inch)
Mixing ratio	2.2 : 1 by weight / 2 : 1 by volume
Potlife	~10 minutes
Material spray temp	min. 50 °C up to 60 °C in 2-component hot airless spray machines
Thinner	Thinners should not be added. Ceramic Polymer cleaners should be used to clean and flush equipment.
Number of coats	"Single coat" application – depending on specification. No limitation of WFT on horizontal surfaces. Minimum coating thickness 250 µm to achieve close film. Sagging limit on vertical surfaces 400 µm at 60 °C.

Consumption	Film thickness per coat: dry	Film thickness per coat: wet	kg/m ²	m ² /kg
Contact Chesterton International technical services for specific system and application advice.	250 µm	250 µm	0.38	2.60
	400 µm	400 µm	0.60	1.67

All above values are approximate and may be used as a guideline for specifications. Consumptions vary according to conditions.

SURFACE PREPARATION

All surfaces to be coated should be clean, dry and free from contamination. Prior to application, all surfaces should be assessed and treated in accordance with ISO 8504:2000. Remove weld spatter and smooth weld seams and sharp edges. Oil or grease should be removed according to SSPC-SP1 solvent cleaning.

Abrasive Blast Cleaning	For immersion service, the surfaces should be prepared by abrasive blast cleaning to minimum SA 2,5 (ISO 8501-1:2007) or SSPC-SP10. A sharp, angular surface profile of $R_a > 50 \mu\text{m}$ is required. The minimum standard for non-immersion service is SA1 (ISO 8501-1:2007) or SSPC-SP7. Contact Chesterton International GmbH for further information. The coating system must be applied before oxidation of the steel occurs. If oxidation does occur the entire oxidized area should be reblasted to the standard specified above. Surface defects revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.
Concrete Substrates	Refer to Chesterton International GmbH for specific recommendations.

CONDITION DURING APPLICATION

Substrate temperature should be minimum 10 °C and minimum 3 °C above dew point. Relative humidity should be below 85 %. Temperature and relative humidity must be measured in the vicinity of the substrate.

CURING TIMES

Substrate temperature	Fully cured	Chemically resistant	Recoat (wet-in-wet)	
			Minimum	Maximum
20°C	12 hrs	4 days	4 hrs	24 hrs
25°C	6 hrs	4 days	4 hrs	18 hrs

STORAGE AND PACKING

Preferred storage conditions are to keep the containers in a dry and cool area below 35 °C provided with adequate ventilation. The containers should be sealed tightly.

Packing	Available in 200L-drums for both components. For manual touch-ups available upon request in smaller packing sizes (14.5 kg-kits)
Shelf life	2 years

QUALITY ASSURANCE AND INSPECTION

To ensure a continuous quality of the product, the quality assurance and inspection plan of Chesterton International GmbH has to be considered. Recommendations for qualified test control units are also available.

HEALTH AND SAFETY

Observe the precautionary notices on the container label, and read the Material Safety Data Sheet before use. The product is intended for use by properly qualified professional applicators in industrial conditions. The product is flammable and should be kept away from sparks, open flames, and other sources of ignition. Smoking is prohibited in the application area. Wear suitable respiratory equipment and apply in well ventilated areas. Avoid contact with skin and eyes.

DISCLAIMER

All technical information in this Product Data Sheet is signified as material description and based on laboratory tests and practical experiences under normal conditions. During individual use, actual measured data may vary due to circumstances beyond our control. In particular, the recommendations regarding the application and use require the proper storage and treatment of our products. Due to differences in materials, substrates and real site conditions Chesterton International GmbH does not assume any warranty or liability for application results or fitness for a particular purpose, of any legal relationship whatsoever, neither from this information, nor from any given recommendations, or from any other oral advice. The user of the product must check the product's suitability for the intended application and purpose. Chesterton International reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our general terms and conditions of sale and delivery. The most recent issue of the Product Data Sheet has to be considered, please ask always for the current version.