

# PENTENS E-501LN

## Tank Lining Epoxy Coating

## Product Data Sheet

### Description

**PENTENS E-501LN** Tank Lining Epoxy is a 100% solids modified epoxy coating designed for high performance waterproofing, chemical resistance and traffic compatibility under a wide range of application and service conditions.

**PENTENS E-501LN** features odorless application, "zero" VOC content, low viscosity and self-priming to concrete, steel, aluminum, ceramic tile\*, plywood, natural stone, glass\*, vinyl tile and many other substrates. (\*Note: Some glassy surfaces require use of adhesion-promoting additives.) Clear or a wide range of colors is available.

### Uses

Common uses for PENTENS E-501LN include:

- Tank lining for sewage tank, waste treatment plant, water purification tank.
- Industrial flooring underlayment.
- Mechanical room flooring non-slip surfacing.

### Advantages

- Non-toxic.
- Odorless.
- High adhesive strength.
- Low viscosity.
- Good penetration.
- High mechanical and chemical resistance.
- Short waiting times.



### Technical & Physical Data

Composition	100% Solids Modified Epoxy: "0" V.O.C.
Viscosity @ 25°C	1110 cps (resin) 385 cps (hardener)
Tensile Strength	250 kgf/cm <sup>2</sup>
Elongation at break	9 %
Adhesive strength	64 kgf/cm <sup>2</sup>
Compressive strength	640 kgf/cm <sup>2</sup>
Hardness (Shore D)	68
Pot life (15kg set at 30°C)	15 minutes
Consumption	0.2kg/m <sup>2</sup>
Curing time	~ Initial curing after 6 hours ~ Full cured 7 days
Shelf Life	1 year when unopened and undamaged
Storage Condition	Store in a dry cool place
Packaging	A component Clear: 18kg/pail Pigmented: 22.5kg/pail B component 9kg/pail

### Important Notes

1. Minimum ambient and substrate temperature is 10°C.
2. Apply only to clean, surfaces should be free of surface water and leaks.



## Instruction for Use

### Surface Preparation

Surfaces to be coated must be clean and dry, and free of grease, oil, dirt and other contaminants. Old lining must be completely removed. If product will be applied over smooth surfaces, a test application should be performed to assure adhesion and compatibility. It is recommended that steel surface be sandblasted to bare metal. Concrete should be neutralized or acid-etched and washed thoroughly. Level off uneven surfaces using PENTENS EPTM epoxy putty & filler.

### Thinning & Mixing

PENTENS E-501LN is supplied as a low viscosity, two-component, 100% solids coating. For most applications, no thinning is required. In some cases thinning may be economically advantageous, to increase product spread rate. In other cases, slight solvent addition may improve the "bite" on a hard existing coating or may improve penetration of slightly oily surfaces. Thinning should be limited to the minimum required, typically about 5 - 10% solvent addition should be sufficient. Use only compatible solvents, such as **PENTENS SO1**.

Mix ratio is nominally 2:1 resin to hardener by volume. Measure and mix consistently. Product is also available in pre-measured units, eliminating the need for field measuring of components. Mix thoroughly for at least two minutes, scraping the container bottom and sides to assure complete mixing. There is no induction or waiting time required after mixing before application.

The exothermic nature of epoxy setting reactions may cause rapid temperature rise when the mixture is left massed in a bucket, resulting in high temperatures and loss of utility of the product.

To maximize handling and working time, pour the mixture into shallow pans or dump and squeegee tile mixture out onto the surface to be coated within a few minutes of mixing.

### Application

Apply a primer coat by brush, roller, squeegee or plural component spray. Epoxy mixture thinned out with reducer using not more than 15% by volume.

Immediately lay out the fiberglass mat on the still wet primer coat. Allow 2 to 3 hours drying time.

Apply saturating coats and allow for initial curing time of 6 to 8 hours. Grind surface to a smooth finish before application of topcoats.

Clean tools and equipment immediately after use with **PENTENS SO1** or Xylene.

**NOTE:** Solvents are hazardous materials. Read and observe guidelines on their manufacturers' Material Safety Data Sheets. Do not subject to immersion for at least 5 days after application, or discoloration may result.

### Curing & Cleaning

The applied epoxy tank lining must be allowed to cure 72 hours before using the tank for storage of potable water. Seven (7) days curing time is necessary to attain chemical resistance. Wash the cured lining using detergents and rinse thoroughly.

### Safety

Epoxy resins are potential sensitizers. Hardener is a Corrosive Liquid. Avoid skin and eye contact and avoid breathing its vapor. Work areas must be adequately ventilated. Remove from skin immediately, in case of contact.