NASWEY Coating



Product Description

NASWEY is a high-tech, two-component, high-solid anti-corrosion coating launched in 2018 by PodLee International (USA). Its unique formulation enables underwater application. The distinct mineral crystal flake structure provides robust rust resistance while also resisting aquatic organisms, protecting structures from bio-corrosion.

This product combines chemical and biological corrosion protection, making it ideal for underwater pipelines, structural components, and "sweating" or humid metal surfaces. It can be applied directly in water.

Intended Uses

Suitable for corrosion and fouling protection of: Dock steel pipe piles. Offshore wind turbine foundations. Underwater pipelines and components. "Sweating pipelines".

Advantages

Underwater application and curing – Significantly reduces construction costs. Integrated anti-corrosion and anti-fouling – Lowers expenses and extends maintenance intervals.

Typical Characteristics

| Item | | Test Data | Testing Standards |
|-------------------------------------|---------------------|----------------------|-------------------|
| Cured Density (g/cc) | | 1.8 | — |
| Solid Content (%) | | 95 | ASTM D3960 |
| Pencil Hardness (H) | | 4 | ASTM D3363 |
| Water Resistance (1000h) | | Pass | ASTM D2247 |
| Adhesion (psi/MPa) | Applied Under Water | 1378 (9.5) | ASTM D4541 |
| Chemical Resistance (90 Days) | HCl (10%) | Pass | ASTM G20 |
| | NaOH (10%) | Pass | |
| | NaCl (10%) | Pass | |
| Salt Spray Test | | 10000 | ASTM B117 |
| Service Temperature (°F/°C) | | -22 (-30) - 194 (90) | _ |

Package

10 KG/Kit.

Surface Preparation

Proper surface preparation is critical for optimal performance:

For underwater application: Remove marine biological residues using power tools.

For "sweating pipelines": Remove loose rust and old coatings (derusting grade ST2).

Mixing

Ensure ambient temperature is 50 - 104 °F (10 - 40 °C). Mixing ratio: 4:1 (By Weight). Weigh components accurately and stir mechanically for 3 - 5 minutes.

Application

Apply using a brush or roller. Single-coat thickness: 200 – 250 μm. For marine environments: Apply at least 2 coats (total thickness 400–500 μm). Minimum recoating interval: 4 hours.

Coverage

Based on a 500 μ m thickness: 1 kg kit will cover 1.06 m² (11.4 ft²)

Pot Life After Mixing

 50° F (10°C) – 2 h, 70°F (25°C) – 1 h, 104°F (40°C) – 0.5 h

Curing Schedule

| Temperature | 50°F (10°C) | 70°F (25°C) | 104°F (40°C) |
|---------------------|-------------|-------------|--------------|
| Surface Dry (h) | 5 | 3 | 2 |
| Complete Curing (h) | 20 | 15 | 10 |

Clean Up

Clean tools immediately after use with solvents (acetone, xylene, alcohol, etc.).

Storage

Store between 10 $\ \C$ (50 \F) and 32 \C (90 \F). Unopened product shelf life: 1 year.

Safety

Before using any products, review the appropriate Material Safety Data Sheet (MSDS) or Safety Sheet for your area. Follow standard confined space entry and work procedures, if appropriate.