

Ply-Guard NS

Technical Bulletin

Ply-Guard NS is a two-component, chemical resistant, non-skid epoxy coating system designed to perform exceptionally well in a broad range of severe environments, including in the presence of strong acids/alkalis and organic solvents. It should be used wherever non-skid properties, chemical and abrasion resistance, corrosive environment resistance & outstanding adhesion are essential. Ply-Guard NS is designed for use on properly prepared concrete and metal surfaces in refineries, offshore platforms, chemical plants, food & beverage plants, and pulp and paper mills.

Key Features

- Excellent Film-Build Properties
- Non-Skid Finish
- Excellent Chemical Resistance
- Excellent Edge Retention

Product Uses

Ply-Guard NS is a superb coating for steel and concrete materials in severe environments, with uses in the following areas:

- Chemical Resistant Industrial Flooring
- Heavy-Duty Coating for Chemical Plants, Refineries, Pulp and Paper Mills, and Sewage-Treatment Plants
- Marine Applications and Off-Shore Drilling Rigs/Platforms

Ply-Guard NS can be used alone or as a topcoat over Polyset's line of WB HRZS® water-based high-ratio zinc silicate products.

Surface Preparation

Remove any oils, grease, loose dirt & particulate, weak sections, curing compounds, and existing coatings from the surface to be coated prior to application of Ply-Guard NS. Steel surfaces must be clean, sound & sandblasted to "Near White Metal" SSPC-10 finish immediately before application of Ply-Guard NS. After sandblasting, surface should be rinsed, vacuumed and dry prior to application. New concrete should be cured to 80% of design strength.

Mixing

Stir individual components prior to mixing together. Mix only what may be applied during the pot life (4 hrs. max.). Mix according to specified mixing ratio. Allow 15 minute induction period to activate Ply-Guard NS before application.

Product Data

Appearance @ 25°C

	Part "A"	Part "B"	Mixed
Color:	Gray	Dk. Amber	Gray
VOC (Lbs./gal.):	1.67	3.80	2.00
Solids (wt.%):	90.8	52.5	87.9
Flash pt. (°C):	30	29	35

Ratio & Cure

Mix Ratio:	5.2 Parts "A"	1.0 Part "B"	By Volume
Initial Set:	2-4 hrs. @ 25°C	Initial Cure:	6-8 hrs. @ 25°C
Recoat Time:	6 hrs. @ 25°C	Final Cure:	24 hrs. @ 25°C

Cured Properties

Finish	Textured Satin Gloss
Temp. Resistance	200–250°C
Recommended DFT	4–6 mil (0.10–0.15 mm)
Theoretical Coverage	319 ft ² /gal. (@ 4 mil DFT)

SPRAY GUN EQUIPMENT RECOMMENDATION

CONVENTIONAL:	FLUID TIP	SPRAY SHAPE
Binks – Model 7E2	0.375" orifice	Round or Fan

(Atomization Pressure: 30 psi; Fluid Pressure: 25 psi)

For conventional spray applications, use bottom feed outlet pressure pot with dual regulators. Ply-Guard NS can also be applied by nylon/polyester brush or 3/8" woven roller in limited applications.

Packaging:	5-Gallon Kit (83 Lbs. Net Weight)
Shelf Life:	18 months in original unopened containers
Storage:	Store between 60–95°F (16–35°C)

FOR ADDITIONAL APPLICATION & EQUIPMENT RECOMMENDATIONS, PLEASE CONSULT YOUR POLYSET TECHNICAL REPRESENTATIVE.

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