

**Proguard 169 Plus** is a 2-component, polyester reinforced, polyurethane topcoat with excellent anti corrosive properties. It is a top coat for epoxy/polyurethane coating systems in demanding environments. **Proguard 169 Plus** has excellent colour retention, UV stability and mechanical strength. It is below the diisocyanate limit eliminating the need for mandatory training for end users (REACH Regulation 1149/2020/EC).



**APPLICATION RANGE**

- External coating for
  - Steel structures
  - Tanks and pipelines
  - Bridges
  - Automotive, Railway
  - On and offshore facilities
  - Applications under environmental influences

**TECHNICAL INFORMATION**

Color	RAL, NCS
Surface	Semi gloss
Volume Solids	Approx. 63 %
Environmental resistance	According to 12944-2 CX
UV-stability	Excellent
Density (20 °C)	Approx. 1.40 g/cm <sup>3</sup> (dependent on color)

**FEATURES AND BENEFITS**

- Extreme colour retention and mechanical strength
- Temperature resistance up to 120 °C (248 °F) dry heat
- One layer UV topcoat, fast curing
- ISO 12944-2 / classification CX

**APPLICATION DATA**

Application methods	Various spray methods. Brush + roll for repair only. <b>Airless spray:</b> Nozzle 0.013-0.015 inch; Flow pressure 140-200 bar / <b>Airmix:</b> Nozzle 0.013-0.015 inch; Flow pressure 70-100 bar / <b>Airspray:</b> Nozzle min 2.0-2.5 mm; Flow pressure min 3-4 bar. <b>Thinner:</b> use 0-5 vol.% for each application method.
Mixing ratio	3 : 1 by volume
Mixing instructions	Mix Part A and Part B intensively, preferably using a mechanical mixing device. The temperature of the mixed product should at least be 10 °C during application.
Potlife	2 hours at 20 °C (68 °F) - waiting time under continuous pressure may reduce pot life!
Material spray temp.	Minimum 20 °C (68 °F) recommended.
Thinner	Proguard 169 Plus Thinner recommended. The necessary amount depends on used equipment, application method and temperature of the mixed product. Use Thinner to flush and clean equipment.
Number of coats	One coat. Standard: 60-100 µm (dry-DFT)(depends on application process) Opacity depends on color. With light colors a second layer (wet-on-wet) may be necessary.
Theoretical consumption	At a dry film thickness of 80 µm: 7.9 m <sup>2</sup> /l
Practical coverage	The performance in practice depends on various circumstances. As a guideline for airless spraying, for large dimensions: 70% of the theoretical coverage. For small dimensions: 50% of the theoretical coverage.

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

### SURFACE PREPARATION

The topcoat is applied on prepared and primed steel substrates. The surface has to be dry, clean, load-bearing and free from separating substances such as fats, oils and salts. Within the re-coating interval the topcoat can be applied directly on the primer/coating. If the re-coat time is exceeded, the primed surface has to be grinded or sweep blasted to achieve best possible adhesion of the topcoat. Depending on the type of preparation and the resulting surface roughness the consumption of material may vary.

<b>Abrasive Blast Cleaning</b>	Not applicable; topcoat is applied on primed/coated surface.
<b>Concrete Substrates</b>	This coating is not suitable for concrete substrates.

### CONDITION DURING APPLICATION

Substrate temperature should be minimum 10 °C (50 °F) and minimum 3 °C (37 °F) above dew point. Relative humidity should be below 90 %. Temperature and relative humidity must be measured in the vicinity of the substrate. Keep application area well ventilated during application and drying, in order to reduce evaporated solvents. This is necessary to acquire good drying conditions and for the good of the applicators' health.

### CURING TIMES

Substrate temperature	Touch-dry	Machinable	Recoat Airless spraying (wet-on-wet)	
			Minimum	Maximum
10 °C (50 °F)	4 hours	18 hours	16 hours	-
20 °C (68 °F)	1.5 hour	10 hours	8 hours	-

### STORAGE AND PACKING

Preferred storage conditions are to keep the containers in a dry and cool area between 5 °C (41 °F) and 40 °C (104 °F) provided with adequate ventilation. The containers should be sealed tightly.

<b>Packing</b>	5 l kits (3.75 l + 1.25 l) + 20 l kits (15 l + 5 l)
<b>Shelf life</b>	12 months

### 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

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