

**Proguard 169 (37)** is a 2-component highly-crosslinked polyurethane topcoat with outstanding color stability and excellent physical properties. The glossy, nonporous surface is long-term resistant against UV-radiation and weathering.



**APPLICATION RANGE**

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



**FEATURES AND BENEFITS**

- Extreme UV-stability and weather resistance
- Temperature resistance up to 120 °C (248 °F) dry heat (at temperatures above 100 °C light and bright colors may become yellow)
- One coat, fast curing
- ISO 12944-2 / classification Im1-3 & C5

**TECHNICAL INFORMATION**

Color	RAL, NCS
Surface	Gloss
Volume Solids	Approx. 57 %
Flash Point	> 25 °C (77 °F)
Chemical resistance	According to 12944-2 C5-M
UV-stability	Excellent
Density	Approx. 1.25 g/cm <sup>3</sup> (dependent on color)

**APPLICATION DATA**

Application methods	All spray methods. Brush + roll for repair only.			
Mixing ratio	3.6 : 1 by weight / 3.03 : 1 by volume			
Mixing time	Component A: Stirrup intensively by mechanical means Components A+B: Mix up homogeneous. Mixer speed >100 rpm			
Potlife	3 hours at 20 °C (68 °F) / 2,5 hours at 25 °C (77 °F) / 2 hours at 30 °C (86 °F) / 1 hour at 40 °C (104 °F) material temperature - waiting time under continuous pressure may reduce pot life!			
Material spray temp.	Minimum 20 °C (68 °F) recommended.			
Thinner	Proguard 169 - Thinner recommended.			
Filters	Check to ensure that filters are clean.			
Number of coats	One coat. Minimum layer thickness 40 µm (dry-DFT); sagging limit 120 µm (dry-DFT) at 20 °C material temperature. Opacity depends on color. With light colors a second layer (wet-on-wet) may be necessary.			

Theoretical consumption	Film thickness per coat: dry	Film thickness per coat: wet	kg/m <sup>2</sup>	m <sup>2</sup> /kg
Contact Ceramic Polymer technical services for specific system and application advice.	40 µm	70 µm	0.08	12.50
	120 µm	210 µm	0.26	3.80

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 swept 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 85 %. Temperature and relative humidity must be measured in the vicinity of the substrate.

## CURING TIMES

Substrate temperature	Dust-dry	Tack free	Cured	Recoat Airless spraying (wet-on-wet)	
				Minimum	Maximum
20 °C (68 °F)	1 hr.	8 hrs.	96 hrs.	48 hrs.	- hrs.
25 °C (77 °F)	1 hr.	7 hrs.	72 hrs.	48 hrs.	- hrs.
30 °C (86 °F)	0.75 hr.	5 hrs.	48 hrs.	36 hrs.	- hrs.
40 °C (104 °F)	0.5 hrs.	4 hrs.	24 hrs.	24 hrs.	- hrs.

## STORAGE AND PACKING

Preferred storage conditions are to keep the containers in a dry and cool area below 25 °C (77 °F) provided with adequate ventilation. The containers should be sealed tightly.

<b>Packing</b>	11.5 kg kits incl. hardener
<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

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 GmbH 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.