

Proguard CN 100 iso is a two pack special composite coating containing micro-ceramic particles reinforcement, based on an ultra-modern Novolac-resin base, providing chemical resistance, corrosion and abrasion protection to a wide variety of substrates in extremely aggressive environments at elevated temperatures.



APPLICATION RANGE

- Internal and external coating for
- Process vessels and storage tanks with extreme temperature changes
- Storage tanks for crude oil, hydrocarbons, chemicals
- Special tanks for urea, bio oils
- Pressure vessels of all kinds
- Pipelines for oil & gas



FEATURES AND BENEFITS

- Solvent-free
- Extreme isolation properties
- Excellent temperature resistance up to 170 °C (338 °F) (dependent on medium)
- Excellent chemical resistance
- 1-layer-system
- ISO 20340 (Performance requirements for protective paint systems for offshore and related structures)

TECHNICAL INFORMATION

Color	Light Gray, Dark Gray
Gloss	Satin
Volume Solids	100 %
Flexibility	Excellent
Seawater resistance	ISO 20340
Corrosion resistance	> 10,000 hours salt spray (ISO7253)
Chemical resistance	Excellent
Abrasion resistance	80 mg (ASTM D 4060)
Adhesion	> 27 MPa (3,916 psi) according to ISO 4624
Density	Approx. 1.19 g/cm ³

APPLICATION DATA

Application by airless spraying	Airless pump, gear ratio 1 : 68 or higher, inlet pressure > 6 bar tip size: 0.023-0.029"; hose length max. 20 m; spray hose diameter max. ¾"; We recommend the removal of the high-pressure filter and the direct suction of the material without use of a siphon tube			
Application by brush/roller	Recommended for small areas, repairs or to precoat edges. To obtain the required layer thickness, additional coating passes (wet-on-wet) may be necessary.			
Mixing ratio by weight	9 : 1 by weight / 7,5 : 1 by volume			
Mixing time	Component A: Stirrup intensively by mechanical means Components A+B: Mix up homogeneous. Mixer speed >100 rpm			
Potlife	30 minutes at 20 °C (68 °F) / 25 minutes at 25 °C (77 °F) / 20 minutes at 30 °C (86 °F) / 10 minutes 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.			
Cleaner	Do not use thinners. We recommend to use Proguard cleaners to clean and flush equipment.			
Number of coats	One or multiple coats, depending on specification. Minimum coating thickness 500 µm, sagging limit per layer: 1000 µm at 20 °C (68 °F) material temperature.			

Theoretical consumption	Film thickness per coat: dry	Film thickness per coat: wet	kg/m ²	m ² /kg
Contact Chesterton International technical services for specific system and application advice.	500 µm	500 µm	0.60	1.66
	1000 µm	1000 µm	1.19	0.84

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

SURFACE PREPARATION

All surfaces to be coated should be clean, dry and free from contamination. Prior to application, all surfaces should be assessed and treated in accordance with ISO 8504:2000. Remove weld spatter and smooth weld seams and sharp edges. Oil or grease should be removed according to SSPC-SP1 solvent cleaning.

Abrasive Blast Cleaning	For best adhesion results the surfaces should be prepared by abrasive blast cleaning to minimum SA 2.5 (ISO 8501-1:2007) or SSPC-SP10. A sharp, angular surface profile of R_t 75-100 μ m is required. Contact Chesterton International GmbH for further information. The coating system must be applied before oxidation of the steel occurs. If oxidation does occur the entire oxidized area should be reblasted to the standard specified above. Surface defects revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.
Concrete Substrates	Refer to Chesterton International GmbH for specific recommendations.

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.

DRYING TIME

Substrate temperature	Fully cured	Chemically resistant	Recoat Airless spraying	
			Minimum	Maximum
20 °C (68 °F)	24 hrs.	7 days	10 hrs.	24 hrs.
25 °C (77 °F)	20 hrs.	7 days	8 hrs.	16 hrs.
30 °C (86 °F)	18 hrs.	7 days	6 hrs.	12 hrs.
40 °C (104 °F)	12 hrs.	5 days	4 hrs.	10 hrs.

STORAGE AND PACKING

Preferred storage conditions are to keep the containers in a dry and cool area below 35 °C (95 °F) provided with adequate ventilation. The containers should be sealed tightly.

Packing	15 kg kits incl. hardener (13.5 kg part A + 1.5 kg part B)
Shelf life	2 years

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.