Proguard CN-OC is a temperature and chemical high-resistant 2- pack special composite coating containing silanized high-tech-micro-particle reinforcement, based on an ultra-modern hybridized epoxy-novolac-resin base specifically designed for stainless steel substrates.

APPLICATION RANGE

Internal coating for

- Storage tanks for crude oil, hydrocarbons, chemicals
- Special tanks for urea, bio oils
- Process vessels
- Pipelines for oil & gas
- Biogas fermenters
- Especially for stainless steel, aluminum and zinc coated surfaces

FEATURES AND BENEFITS

- Excellent chemical resistance
- High corrosion and abrasion protection to stainless steel substrates
- Temperature resistance up to 150 °C (302 °F) (dependent on medium)
- Excellent adhesion on stainless steel
- 1-layer-system
- High-solid content

TECHNICAL INFORMATION

Color	Anthracite
Gloss	Satin
Volume Solids	98 % (±1 %)
Flexural Strength	52 MPa (7,542 psi) according to ASTM D790
Chemical resistance	Excellent
Abrasion resistance	49 mg (ASTM D4060)
Adhesion	> 20 MPa (2,900 psi) on stainless steel
Specific Gravity (Mix)	Approx. 1.3 g/cm³

APPLICATION DATA

Application by airless spraying	Airless pump, gear ratio 1 : 68 or higher, inlet pressure > 6 bar, tip size: 0.015-0.023", hose length max. 15m, spray hose diameter min. 1/2"; 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	3 : 1 by weight / 2.36 : 1 by volume
Mixing time	Component A: Stirup 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) / 15 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. Application of multiple layers must be wet-on-wet! Minimum coating thickness 250 µm; sagging limit per layer: 400 µm at 20 °C (68 °F) material temperature.

Theoretical consumption	Film thickness per coat: dry	Film thickness per coat: wet	kg/m²	m²/kg
Contact Chesterton International techical services for specific system and application advice.	250 µm	255 µm	0.33	3.03
	400 µm	408 µm	0.53	1.89

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

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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 µm 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	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	Fully cured	Chemical resistance	Recoat Airless spraying
20 °C (68 °F)	24 hrs	7 days	only wet-on-wet!
25 °C (77 °F)	20 hrs	4 days	only wet-on-wet!
30 °C (86 °F)	18 hrs	3 days	only wet-on-wet!
40 °C (104 °F)	12 hrs	2 days	only wet-on-wet!

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	13.33 kg kits incl. hardener (10 kg part A + 3.33 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.

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