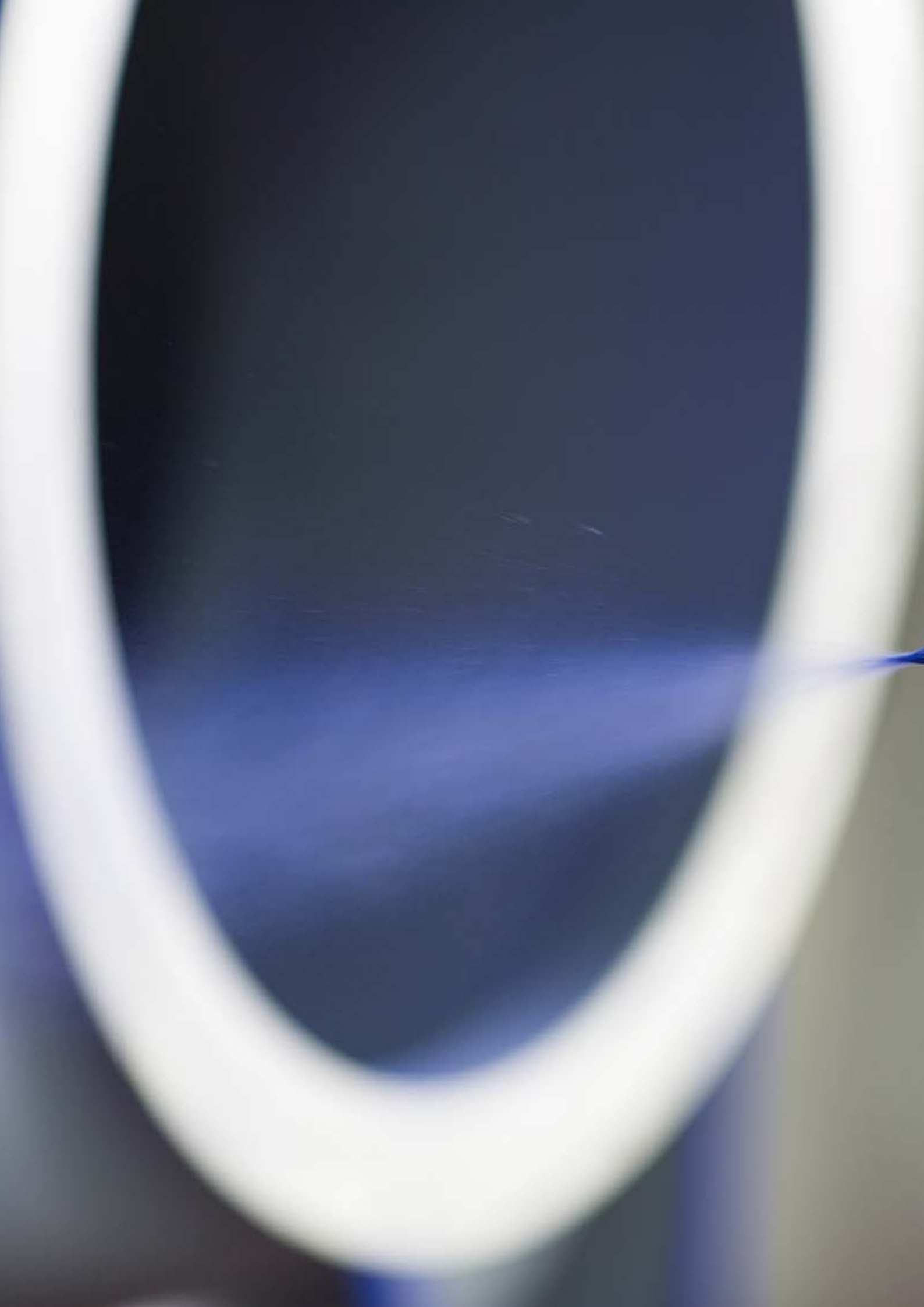


CERAMIC POLYMER  
A CHESTERTON BRAND

THE  
**COATING**  
BRAND

CARTRIDGES | CORROSION PROTECTION MADE EASY!

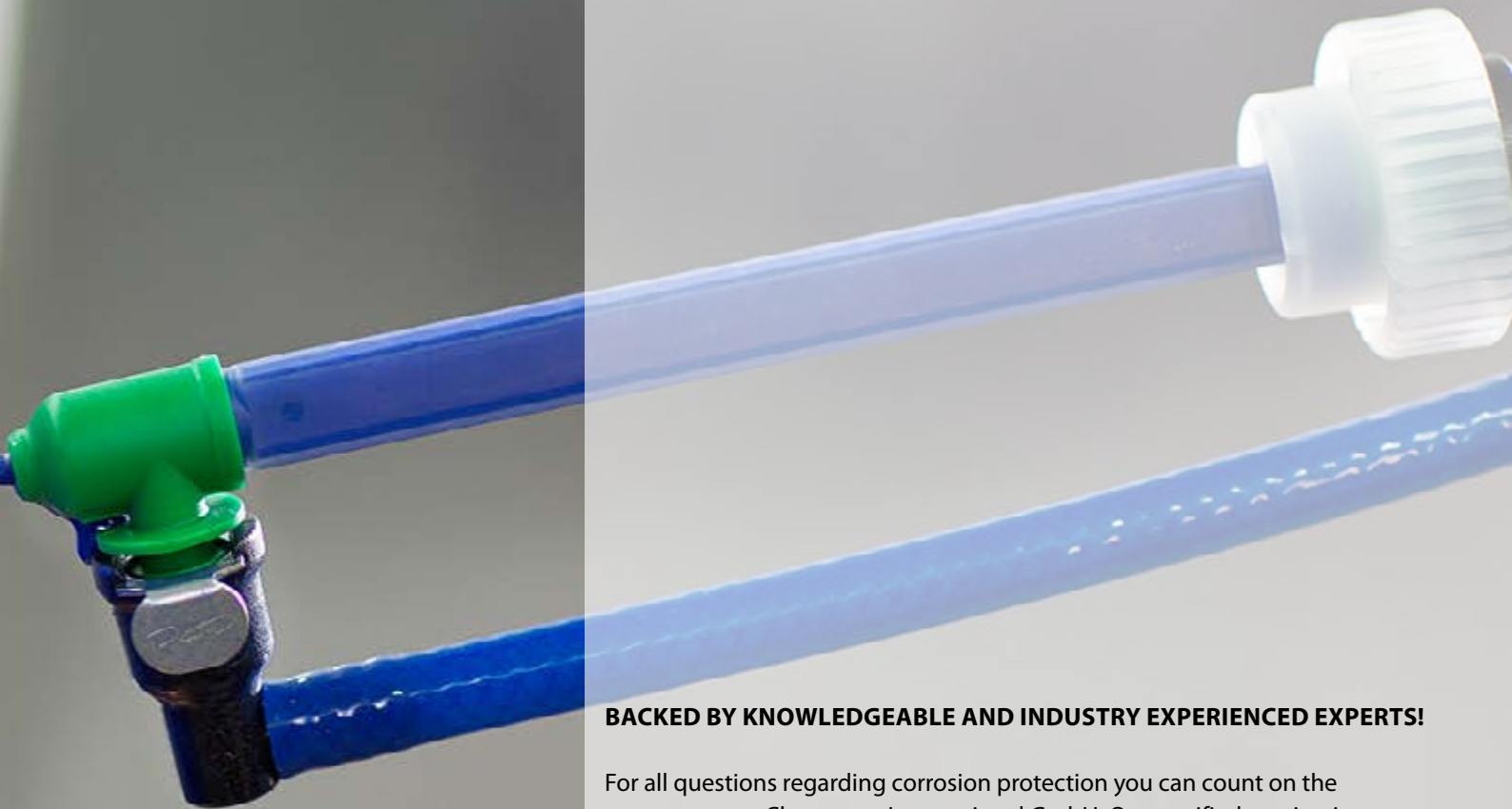


## ON NEW PATHS TO EFFECTIVE CORROSION PROTECTION

For 20 years, Chesterton International GmbH has manufactured protective coatings with performance and ease of use foremost in mind.

By incorporating micro particle reinforcements and advanced thermoset polymer technology we are able to provide outstanding corrosion protection and resistance to delamination under aggressive chemical and elevated temperature exposures.

By cartridge application our effective coating systems are especially suitable for repairs, coating of small areas as well as areas which are difficult to access in all scopes of industry.



## BACKED BY KNOWLEDGEABLE AND INDUSTRY EXPERIENCED EXPERTS!

For all questions regarding corrosion protection you can count on the expert team at Chesterton International GmbH. Our certified coating inspectors place special emphasis on understanding your needs before consulting on a product.

Whether choosing the optimum coating product, or seeking an on-site consultation, we are here assist you sustain the value of your investments.



**CERAMIC POLYMER**  
A CHESTERTON BRAND



# CONVINCING BENEFITS

Our high-quality coatings with best protection properties – practically portioned in cartridges of the advanced Sulzer Mixpac-Technology – are complete systems which simplify the application process and offer significant cost benefits.

With conventional spraying application methods, corrosion protection of small areas, repairs or areas which are difficult to access is in economical views unprofitable. The use of heavy equipment, big product packages and possibly a significant loss of material is complicated and cost-intensive – we provide a solution for efficient coating application within these scopes.

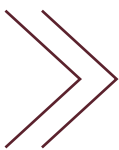
The cartridge application offers a fast, simple and clean method to achieve high-quality coating results. The Sulzer Mixpac Technology sets the standard for multi-component spray systems. For our Cartridge-Products we provide in our portfolio manual dispenser or spray dispenser with various accessories. The 2 component coating is automatically mixed in correct ratio with constant quality. Thus, the material can be applied controlled and precisely.

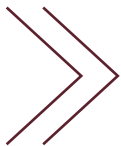
The extremely solid cartridges are resealable, the remain material can be used up to 6 more months. Empty cartridges are no hazardous waste; they can be disposed inexpensively.

## **OPTIMUM CORROSION PROTECTION WITH A SIMPLE PUSH OF YOUR FINGER**

Beside premium application equipment we offer first class protective coatings to accomplish ideal corrosion protection. For the cartridge application we have selected special products from our portfolio which fulfill the highest product requirements for various industries.

Different substrates such as steel, stainless steel, aluminum, mineral substrates and plastics can be protected effectively in one layer. You can find details regarding technical information, physical properties and resistances of our Cartridge-Systems on the following pages of this brochure.





#### **COST SAVINGS**

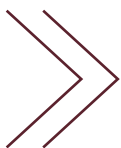
- Low Invest – cost-efficient solution for a wide range of small applications
- Shorter working times – no need of extensive mixing procedure
- Automatic mixing – prevention of mixing failures
- Saving resources – No loss of material, no cured residues in the package

#### **SIMPLE APPLICATION**

- Automatic mixing allows exact mixing ratio
- Precise dosing – even application, low spray losses
- Portability – lightweight, portable dispenser for versatile use

#### **HIGH-QUALITY COMPONENTS**

- Extremely solid MIXPAC™ cartridge of Sulzer Chemtech Technology
- Patented cartridge seal
- Spray mixer tried and tested QUADRO™ mixing technology
- Clean resealable after use, remaining material usable for at least 6 months



#### **SURFACE PRETREATMENT**

To maximize performance and longevity proper surface preparation is recommended.

At a minimum all surfaces to be coated should be clean, dry and free from contamination. Prior to application, all metal 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.



CORROSION PROTECTION MADE EASY! HIGH-QUALITY CARTRIDGE SYSTEMS



# MANUAL DISPENSER

## *MixCoat™ Manual System*



MixCoat™ Manual System is a lightweight, manual dispenser, which is excellently suited for repair purposes of all kinds. The applied coating is easy to distribute by conventional hand tools e. g. spatula.



For the protection of welds and edges an appropriate mixing tip with brush is additionally available.



# SPRAY DISPENSER

## *MixCoat™ Spray*



MixCoat™ Spray is a lightweight spray dispenser. This device requires only a pressurized air connection (compressor, 7 bar, 250 l/min). Due to the low weight exact spraying over a long period is possible. Moreover, the dispenser can be operated with one hand.

For the completion of this system the Hybrid-Flex-System can also be purchased. The dispenser is put on easily with a belt; the flexible hose (1.5 m or 3 m) with the attached spray nozzle provides a proper coating result. This combination is the ideal solution for spray coating of small surfaces or areas which are difficult to access.

**STP-EP-HV Cartridge** is a surface tolerant two pack ceramic composite epoxy coating providing outstanding corrosion protection to a variety of metal, fiberglass, reinforced plastic and concrete substrates. As cartridge-kit the product is especially suitable for repairs, coating of small surfaces and areas which are difficult to access.



**APPLICATION RANGE**

- As internal or external coating for repairs, coating of small surfaces and areas which are difficult to access for:
- Vessels and process tanks
  - Storage tanks for hydrocarbons
  - Offshore and onshore constructions
  - Tubes and pipelines



**TECHNICAL INFORMATION**

<b>Color</b>	gray
<b>Gloss</b>	satin
<b>Volume solids</b>	Approx. 100 %
<b>Flexural Strength</b>	57 MPa (8,267 psi) according to ASTM D790
<b>Chemical resistance</b>	excellent
<b>Abrasion resistance</b>	53 mg loss (ASTM D 4060)
<b>Adhesion</b>	37 MPa (5,366 psi) on carbon steel (ASTM D4541)
<b>Density</b>	Approx. 1.50 g/cm <sup>3</sup>

**FEATURES AND BENEFITS**

- High-solid content
- High chemical resistance
- Excellent abrasion resistance
- Surface tolerance
- Temperature resistance up to 120 °C (248 °F) (dependent on medium)
- Clean resealable after use, remaining material usable for at least 6 months
- Shorter working time, no need of extensive mixing procedure
- Cold application possible (20 °C / 68 °F), without preheating
- Prevention of mixing failures
- Portability - lightweight, portable dispenser for versatile use

**PACKAGING AND COVERAGE**

- 1.5 kg Cartridge - 1000 ml volume of matched mixing ratio
- Theoretical coverage at a layer thickness of:  
 200 µm: 5 m<sup>2</sup> | 500 µm: 2 m<sup>2</sup>

**APPLICATION DATA**

<b>Application methods</b>	2-Component-Mixpack-Cartridge. Only applicable with suitable dispenser, available at Chesterton International GmbH
<b>Mixing ratio</b>	3 : 1 per volume, ready for use.
<b>Potlife (20°C)</b>	Reclosable after use, min. 6 months usable.
<b>Material application temp.</b>	minimum 20 °C (68 °F) maximum 40 °C (104 °F).
<b>Number of coats</b>	One or multiple coats, depending on specification. Minimum coating thickness 200 µm; sagging limit per layer: 500 µm at 20 °C (68 °F) material temperature.

**DRYING TIME**

Substrate temperature	Fully cured	Chemical resistant	Recoat Airless spraying	
			Minimum	Maximum
20 °C (68 °F)	24 hrs	7 days	5 hrs	36 hrs
30 °C (86 °F)	18 hrs	5 days	3 hrs	24 hrs

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



**CN-1M Cartridge** 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. As cartridge-kit the product is especially suitable for repairs, coating of small surfaces and areas which are difficult to access.



**APPLICATION RANGE**

- As internal coating for repairs, coating of small surfaces and areas which are difficult to access for:
- Storage tanks and process vessels for crude oil, hydrocarbons, chemicals
  - Special tanks for urea, bio oils
  - Biogas fermenters
  - Pipelines for oil & gas



**TECHNICAL INFORMATION**

<b>Color</b>	black
<b>Gloss</b>	satın
<b>Volume solids</b>	98 % (±1 %)
<b>Flexural Strength</b>	44 MPa (6,382 psi) according to ASTM D790
<b>Chemical resistance</b>	Excellent
<b>Abrasion resistance</b>	48 mg (ASTM D4060)
<b>Adhesion</b>	41 MPa (5,947 psi) on carbon steel (ASTM D4541)
<b>Specific Gravity (Mix)</b>	Approx. 1.2 g/cm <sup>3</sup>

**FEATURES AND BENEFITS**

- Excellent chemical resistance
- High corrosion and abrasion protection
- Temperature resistance up to 150 °C (302 °F) (dependent on medium)
- High-solid content
- Clean resealable after use, remaining material usable for at least 6 months
- Shorter working time, no need of extensive mixing procedure
- Cold application possible (20 °C / 68 °F), without preheating
- Prevention of mixing failures
- Portability - lightweight, portable dispenser for versatile use

**PACKAGING AND COVERAGE**

- 1.2 kg Cartridge - 1000 ml volume of matched mixing ratio  
Theoretical coverage at a layer thickness (DFT) of:  
250 µm: 3.8 m<sup>2</sup> l 600 µm: 1.6 m<sup>2</sup>

**APPLICATION DATA**

<b>Application methods</b>	2-Component-Mixpack-Cartridge. Only applicable with suitable dispenser, available at Chesterton International GmbH
<b>Mixing ratio</b>	3 : 1 per volume, ready for use.
<b>Potlife (20°C)</b>	reclosable after use, min. 6 months usable
<b>Material application temp.</b>	minimum 20 °C (68 °F) maximum 40 °C (104 °F)
<b>Number of coats</b>	One or multiple coats, depending on specification. Application of the 2nd layer must be wet-on-wet! Minimum coating thickness 250 µm; sagging limit per layer: 600 µm at 20 °C (68 °F) material temperature.

**CURING TIMES**

Substrate temperature	Fully cured	Chemical resistance	Recoat Airless spraying
20 °C (68 °F)	24 hrs	7 days	only wet-on-wet!
30 °C (86 °F)	18 hrs	3 days	only wet-on-wet!

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

**CN-OC Cartridge** 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**

- As internal coating for repairs, coating of small surfaces and areas which are difficult to access for:
- Storage tanks and process vessels for crude oil, hydrocarbons, chemicals
  - Special tanks for urea, bio oil
  - Biogas fermenters
  - Pipelines for oil & gas
  - Various stainless steel and aluminum applications



**TECHNICAL INFORMATION**

<b>Color</b>	Black
<b>Gloss</b>	Satin
<b>Volume solids</b>	98 % (±1 %)
<b>Flexural Strength</b>	44 MPa (6,382 psi) according to ASTM D790
<b>Chemical resistance</b>	Excellent
<b>Abrasion resistance</b>	48 mg (ASTM D4060)
<b>Adhesion</b>	> 20 MPa (2,900 psi) on stainless steel
<b>Specific Gravity (Mix)</b>	Approx. 1.2 g/cm <sup>3</sup>

**FEATURES AND BENEFITS**

- Excellent chemical resistance
- High corrosion and abrasion protection
- Temperature resistance up to 150 °C (302 °F) (dependent on medium)
- High-solid content
- clean resealable after use, remaining material usable for at least 6 months
- shorter working time, no need of extensive mixing procedure
- cold application possible (20 °C / 68 °F), without preheating
- prevention of mixing failures
- portability - lightweight, portable dispenser for versatile use

**PACKAGING AND COVERAGE**

- 1.2 kg Cartridge - 1000 ml volume of matched mixing ratio  
Theoretical coverage at a layer thickness (DFT) of:  
250 µm: 3,8 m<sup>2</sup> | 600 µm: 1,6 m<sup>2</sup>

**APPLICATION DATA**

<b>Application methods</b>	2-Component-Mixpack-Cartridge. Only applicable with suitable dispenser, available at Chesterton International GmbH
<b>Mixing ratio</b>	3 : 1 per volume, ready for use.
<b>Potlife (20 °C)</b>	reclosable after use, min. 6 months usable.
<b>Material application temp.</b>	minimum 20 °C (68 °F) maximum 40 °C (104 °F).
<b>Number of coats</b>	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: 600 µm at 20 °C (68 °F) material temperature.

**CURING TIMES**

Substrate temperature	Fully cured	Chemical resistance	Recoat Airless spraying
20 °C (68 °F)	24 hrs	7 days	only wet-on-wet!
30 °C (86 °F)	18 hrs	3 days	only wet-on-wet!

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

**CP-Elastic 9550 Cartridge** is a 2-component modified polyurethane spray elastomer that acts as a waterproofing and crack-bridging system, which is used to protect against the ingress of water into concrete, timber, cement screed, fibre cement, bitumen. Also suitable for metal substrates. The cartridge-kit especially is designed for repairs, coating of small surfaces and areas which are difficult to access.



**APPLICATION RANGE**

- Roofs
- Carparks, underground parking areas
- Substructures
- Tunnels
- Water retaining structures
- Shafts, foundation walls
- Tanks
- Terraces, balconies

**RESISTANCES**

- salt water / sewage
- diluted acids and alkalis
- ground and surface water
- mineral oils, diesel fuels
- dry temperature max. 80 °C
- flexible at low temperatures, down to -40 °C
- resistant to root growth
- short-term +250 °C (applied mastic asphalt)

**TECHNICAL INFORMATION**

Color	gray
Volume solids	approx. 100 %
S <sub>d</sub> - value	< 4 m
Tensile strength (DIN 53504)	> 10 N/mm <sup>2</sup>
Elongation at break (DIN 53504)	> 300 %
Crack-bridging in acc. with ZTV-SIB - guidelines	IV <sub>T+V</sub> = dynamic 0,4 mm / at -20 °C
Crack open at 70 °C for 1 week	min. 1 mm without tear at 2 mm thickness
Viscosity (23 °C) A/B	approx. 1250 mPa·s ± 300 / approx. 2150 mPa·s ± 300
Density (23 °C) component A / component B	approx. 1.04 g/cm <sup>3</sup> / approx. 1.09 g/cm <sup>3</sup>

**APPLICATION DATA**

Application methods	2-Component-Mixpack-Cartridge. Only applicable with suitable dispenser, available at Chesterton International GmbH
Mixing ratio A : B	100 : 100 by volume (1 : 1), ready for use
Start of reaction	approx. 10 - 15 seconds
Material spray temperature	preheat both components to 50 °C, please consult us regarding preheating methods!
Maximum relative humidity of air	90 % (dew point +3 °C)
Curing time / foot traffic	10 minutes at 5 °C / 5 minutes at 23 °C / 3 minutes at 30 °C
Duration between coats	10 minutes - 4 hours
Curing time	36 hours at 5 °C / 24 hours at 23 °C / 24 hours at 30 °C
Theoretical consumption	approx. 2 - 4 kg/m <sup>2</sup> . Spray the material in a crosswise manner 2 - 4 coats (wet to wet).

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

**FEATURES AND BENEFITS**

- High solid content
- High tensile strength, high elongation at break
- High tear resistance, high abrasion resistance
- Highest ageing resistance
- Flexible at low temperatures
- Resistant to mastic asphalt up to +250 °C
- Resistant to hydrolysis
- Permeable to water vapour diffusion
- Resistant to microbes
- Clean resealable after use, remaining material usable for 3 months
- Portability - lightweight, portable dispenser for versatile use

**PACKAGING AND COVERAGE**

- 1.6 kg cartridge - 1500 ml volume of matched mixing ratio
- Theoretical coverage at a layer thickness of 2 mm:  
0.5-1 m<sup>2</sup>



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