

Ceramic-Polymer SF/LF-SW is a 2-component epoxy coating providing excellent abrasion and corrosion protection in aggressive environments. This product is especially designed for hydraulic engineering and is approved by the BAW.



APPLICATION RANGE

- Steel constructions for hydraulic engineering of all kinds
- Lock gates, water power plants
- Sheet piles, weir plants
- Pipelines

TECHNICAL INFORMATION

Color	Black, silk grey (other colors on request)
Volume solids	Approx. 100 %
VOC	Approx. 0 mg
Acid resistance	Very good, please consult us
Chemical resistance	Very good, please consult us
Abrasion resistance	Excellent
Adhesion	Very good
Specific Gravity (Mix)	Approx. 1.65

FEATURES AND BENEFITS

- Approved by the BAW
- Excellent corrosion and abrasion protection
- High tolerance to early water stress
- Resistant to water and brackish water
- Resistant to mineral oil, aliphatic hydrocarbons, diluted acids, oil, fat, lubricants
- Temperature resistant up to 100 °C (dry heat) or 50 °C (wet heat)

APPLICATION DATA

Application methods	Airless spray pump (without filter), Ratio 1:68 or higher. Tip size: 0.017-0.025"; Hose length max. 20m; Spray hose diameter max. ¾"; Material must be taken up directly (without intake hose); avoid waiting time under pressure (reduction of pot life!) For small areas and repair application with roller possible, 250-300 µm per layer recommended.			
Mixing ratio	7 : 1 by weight / 4 : 1 by volume			
Mixing time	Component A: Stirup intensively by mechanical means Components A+B: Mix up homogeneous. Mixer speed >100 rpm			
Potlife	Approx. 35 minutes at 20 °C / approx. 30 minutes at 23 °C / approx. 20 minutes at 30 °C ambient temperature - waiting time under continuous pressure may reduce pot life!			
Material spray temp.	Minimum 20°C, maximum 30 °C			
Thinner	Thinners must not be added. Use Proguard cleaners to clean and flush equipment.			
Filters	Remove filters			
Number of coats	1 or 2 coats - approx. 600-1200 µm (DFT) per layer / depending on object and environment.			
Theoretical Consumption	film thickness per coat: dry	film thickness per coat: wet	kg/m ²	m ² /kg
Please contact Chesterton International technical services for specific system and application advice.	600 µm	600 µm	0.99	1.01
	1200 µm	1200 µm	1.98	0.51

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	<p>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 $R_t > 50 \mu\text{m}$ is required. Contact Chesterton International GmbH for further information.</p> <p>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.</p>
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CONDITION DURING APPLICATION

Substrate temperature should be minimum 10°C and minimum 3°C 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	foot traffic	mechanical resistant	chemical resistant	recoat (wet on wet)	
				minimum	maximum
10 °C	24 hrs	72 hrs	7 days	12 hrs	48 hrs
23 °C	12 hrs	48 hrs	5 days	6 hrs	48 hrs
30 °C	6 hrs	24 hrs	3 days	3 hrs	24 hrs

STORAGE AND PACKING

Preferred storage conditions are to keep the containers in a dry and cool area below 30°C provided with adequate ventilation. The containers should be sealed tightly.

Packing	16 kg kits incl. hardener (14 kg Part A + 2 kg Part B)
Shelf life:	See labels for shelf life details

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 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.