

CEILCOTE® 222GF FLAKELINE® Coating

Catalyzed graphite filled vinyl ester coating

DESCRIPTION:

CEILCOTE® 222GF FLAKELINE® coating is a vinyl ester resin system with graphite fillers which exhibits excellent resistance to both aliphatic and aromatic organic and inorganic acids. It provides moderate resistance to hydrofluoric acid.

CEILCOTE 222GF FLAKELINE coating can be used where electrical conductivity is required.

TYPICAL USES:

- Tanks & steel structures.
- Trenches & pits.
- Vaults & dikes.
- Secondary containment.
- Floors.

ADVANTAGES:

- Outstanding chemical resistance.
- Excellent resistance to various concentrations of hydrochloric acid.
- Used on floors where electrical conductivity is needed.
- Quick turn around for service.

COLOR:

Dark Gray

PHYSICAL PROPERTIES:

Generic Type	Vinyl ester
Tensile Bond Strength	500 to 2,000 psi (3.4 to 14 MPa)
Flexural Strength <i>ASTM D890</i>	3,500 to 4,000 psi (24 to 28 MPa)
Flexural Modulus <i>ASTM D790</i>	0.5 to 0.7 x 10 ⁶ psi (3.5 to 4.8 GPa)
Moisture Permeability <i>ASTM E96 Proc. E</i>	0.002 perm inch (0.005 perms cm)
Tensile Strength <i>ASTM D-638</i>	2,500 to 3,500 psi (17 to 24 MPa)
*Electrical Properties <i>Megger Reading</i>	25,000 to 250,000 Ohms
<i>*Typical reading over three feet distance when applied over CEILCOTE 380C (Conductive) PRIMER.</i>	

Tensile Elongation 0.3 to 0.5%

Density (wt. per gal) 10.0 ± 0.2 lbs/gal (1.2 ± 0.02 kg/litre)

Viscosity 3,500 to 4,000 cps @ 77°F

Flash Point
Pensky Martens Closed Cup 89°F (32°C)

Volatile Organic Compounds (VOC)
Lab 23 method of Reg. 8-4-111 of California Code 0.12 lbs/gal

Service Temperature Limits (continuous)

- Immersion/Condensing Fumes 130°F (54°C)
- Continuous Dry 350°F (177°C)

Shelf Life
(Expiration dates printed on labels)

- 2 months at 70°F to 80°F (21°C to 27°C)
- 30 days or less at 80°F to 90°F (27°C to 30°C)

MIXING RATIO:

Stir thoroughly, then add 3.0 oz. of #2C Hardener per gal of CEILCOTE 222GF FLAKELINE liquid.

COVERAGE:

Actual coverage is 25 to 35 ft²/gal (.6 to .85 m²/litre)
@ 35 mils which depends on loss due to waste and overspray.

HANDLING PROPERTIES:

Temperature	Working Time	To Recoat/ Handle	To Cure
@ 50°F (10°C)	1-1/2 hr	12 to 24 hrs	48 hrs
@ 73°F (23°C)	1 hr	4 to 8 hrs	24 hrs
@ 90°F (32°C)	45 min	3 to 4 hrs	16 hrs

PACKAGING:

3/4 & 4 gal units

LIMITATIONS:

Store in a cool, dry place away from fire hazards. Do not apply CEILCOTE 222GF FLAKELINE coating when the surface temperature is below 50°F (10°C) or over 110°F (43°C). CEILCOTE 222GF FLAKELINE coating must be recoated within 7 days when shaded from sunlight. If the coating is applied in sunlight (even on cloudy days) it must be recoated within 4 hours to obtain proper intercoat adhesion.

Due to the limited shelf life Master Builders will not warranty the shelf life of CEILCOTE 222GF FLAKELINE coating and will not accept return of this material.

APPLICATION: (abbreviated)

(For complete details, refer to Installation Procedure #2.2I for CEILCOTE 200 FLAKELINE Series.)

Surface Preparation:

Steel:

Blast with sharp abrasive. A "White Metal" surface (**SSPC #5-89 or NACE #1**) is required with a minimum anchor pattern profile of 3 mils.

Concrete:

Abrasive blasting or scarification to remove laitance and surface contaminants is required. Concrete must be thoroughly cured, free of oils, curing solutions and mold release agents, dust and must be dry at time of application. Refer to ASTM D-4263.

Primers:

For Steel Surfaces:

CEILCOTE 370 PRIMER

For Concrete Surfaces:

- CEILCOTE 380 PRIMER
- CEILCOTE 380C (Conductive) PRIMER.

[Use when sparktesting (High voltage Holiday testing) will be conducted on concrete]

- Mechanically premix CEILCOTE 222GF resin (i.e. Part A) 2 minutes individually prior to adding hardener. After initial mixing, add 2-1/2 oz of #2C Hardener per gallon of CEILCOTE 222GF resin and mix three additional minutes.
- Apply CEILCOTE 222GF resin and hardener at 20 to 32 mils WFT to yield 15 to 25 mils DFT, target of 18 mils DFT. Allow to harden. Repeat for second coat application.

Thinning:

None required. DO NOT THIN.

Application Equipment:

Spray application is recommended. Small areas may be coated by brush or roller.

Conventional Spray:

For equipment recommendation, please reference Installation Procedure 2.2I.

Air Assisted Airless:

For equipment recommendation refer to Installation Procedure #2.2I (Special Catalyst Spray Equipment section).

Airless Spray:

Normally not recommended. Consult Master Builders, Inc.

Brush or Roller:

When rolling or brushing three coats may be required to

achieve recommended film thicknesses.

CLEAN UP:

Use T-410 Solvent, methyl ethyl ketone or lacquer thinner.
DO NOT USE ACETONE SOLVENT.

SAFETY:

- CEILCOTE 222GF FLAKELINE coating contains vinyl ester resins, styrene monomer and graphite filler and carbon fibers. The hardener is an organic peroxide. The product's components have been formulated to optimize physical lining characteristics while minimizing hazardous physical and health factors encountered during application. A concerted effort is made to be aware of the latest chemical toxicological information and to apply this knowledge in a responsible manner to insure product safety.
- During application of CEILCOTE 222GF FLAKELINE materials, always wear gloves and appropriate work clothing to minimize contact. Ventilation is required with special consideration for enclosed or confined area. Air movement must be designed to insure turnover at all locations in work area and adjacent areas to avoid buildup of heavy vapors. Use caution when handling flammable liquids, eliminate sources of ignition from work area, and containers with residues.
- Observe safe storage practices by separating resins from hardeners, by keeping solvents and hardeners in a cool area free of sources of ignitions, and by observing a special warning or RED and YELLOW labeled products. The RED label represents amine-type chemicals and the YELLOW label represents organic peroxide-type chemical which should not be stored adjacent or mixed together because of the possible violent reaction between them.
- Product Material Safety Data Sheets (MSDS) and Installation Procedure are available and should be consulted when handling products. These products are for industrial and professional use only; application directions must be followed.

For additional information, contact your local Master Builders Representative

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