



Technical Data Sheet (TDS)

Product Description

CERAMIXX is a Low VOC, high solids, two-component sprayable ceramic urethane coating.

Product features:

- Very good impact resistance
- Very high abrasion resistance
- Very high adhesion strength
- High build
- High solid
- Outstanding chemical resistance
- Excellent weatherability
- VOC compliant

Recommended Uses

CERAMIXX is intended for industrial applications; either new build or maintenance.

CERAMIXX is a sprayable ceramic urethane used to coat steel, concrete, masonry or other substrates where mechanical, corrosion, chemical and thermal protection is required.

Industries:

- Oilfield & Energy Services
- Chemical facilities
- Power Plants
- Water treatment facilities
- Waste and Recycling Industry

Note: It is recommend that you contact Endura prior to application to discuss the preferred method and adaptations that best suit your needs.

Mix Ratio

2 parts by volume of component A **[CLRMXXXX]**
(Part Number varies with color)

1 part by volume of component B **[FUB2600]**

The recommended temperature when mixed is 68-77°F (20-25°C).

Product Characteristics

| | |
|--|--------------------------|
| Gloss: | Medium: 60GU at 60° |
| Slight gloss variations will occur depending on color. | |
| Volume Solids Mixed: (Unreduced) CLRM12814:FUB2600 (2:1) | 72% ± 4% |
| Volume solids will vary by color | |
| Pot Life: (77°F (25°C) and 50% RH) | 8 - 10 Hours |
| Note: Pot life is reduced when Super Catalyst II is used | |
| VOC Mixed (Unreduced): EPA Method 24 CLRM12814:FUB2600 (2:1) | 247 g/l 2.062 lb /gal |
| VOC Content will vary by color Note: All colors are below 420 g/l | |
| Shelf Life: | |
| Component A | 3 years |
| Component B | 2 years |
| For unopened product (77°F (25°C)) | |

Surface Prep

CERAMIXX can be applied over all Endura primer sealers and primer surfacers without sanding during their topcoat window. The topcoat window varies with each primer. See the relevant primer technical data sheet for the specific topcoat window data.

If the primer topcoat window has been surpassed, the primer should be sanded with 240 – 280 grit sandpaper to achieve inter-coat adhesion. All sanding dust must be blown off prior to application of the topcoat

Application Method

CERAMIXX can be applied using most spray painting systems.

Note: Assure that any solvent absorbent primer surfacers are properly sealed with a primer sealer prior to application of the topcoat.



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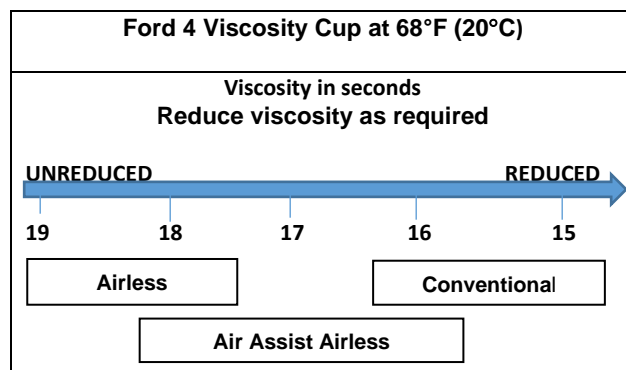
Apply one to two single wet coats to achieve desired film build. Allow 30 minutes to a maximum 4 hours flash time between coats.

Note: Periodic agitation may be required to keep the ceramic particles in suspension.

Spray Gun Setup

| Feed Type | Fluid Tip | Application Pressures (heel of gun) | Fluid Delivery |
|--------------------|------------|-------------------------------------|----------------|
| Siphon Feed | 1.6-1.8 mm | 40-50 psi | |
| Gravity Feed | 1.3-1.4 mm | 30-40 psi | |
| Pressure Feed | 1.0-1.4 mm | 55-65 psi | 12-14 oz./min |
| Air Assist Airless | 9-13 Thou | 1,000-1,800 psi | |
| Airless | 9-13 Thou | 1,000-3,000 psi | |

Spray Viscosity



Note: Spraying viscosity and thinning will depend on ambient conditions, spray equipment used, and the desired surface finish.

Note: A spray test should be done prior to reducing.

To maintain VOC compliance, if required, thin CERAMIXX with Endura Low VOC topcoat Thinners/Reducers. VOC content of the following Reducers: (0g/l, 0lbs/gal)

FTH0021 – Low VOC Topcoat Thinner/ Reducer
FTH0023 – Slow Low VOC Topcoat Thinner / Reducer

Film Build

CERAMIXX has a recommended film build thickness of:

| | | |
|---------------------------|------------------------|--------------------------|
| Wet: WFT Unreduced | 4.0 – 13.5 mils | 100 – 345 microns |
| Dry: DFT | 3.0 – 10 mils | 75 – 250 microns |

Theoretical coverage at 1.0 mil (25 microns)
Average DFT is: 1154 ft² per gallon at 100 % transfer efficiency.

Dry Times

| | 68-77°F (20-25°C) |
|----------------------|--------------------------|
| Dry to Touch | 4-6 Hours |
| Dry to Handle | 1 Day |
| Full Cure | 7-9 Days |

Note: Dry Times are subject to ambient conditions (temperature and humidity) and good airflow and film build of the topcoat.

Note: Using Super Catalyst II with CERAMIXX will accelerate drying times.

For best results surface temperature must be 86°F (30°C) or less before topcoating.

Maximum re-coat window without sanding is 18 hrs at 68°F (20°C). After 18 hours CERAMIXX must be mechanically sanded with 220 – 320 grit to achieve inter-coat adhesion.

For questions about scheduling please contact your Endura representative.

Clean Up

Clean all equipment immediately after use with Endura High Strength Gun Wash, or Endura EX-2C thinner.

Follow manufacturer's safety recommendations when using any solvent.



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Ordering Information (sizing)

Available in Quarts and Gallons
Other custom sizes may be available.

| 3 Mixed Quarts | | |
|---|---------------|-------|
| Comp A X2 Part numbers vary by color | CLRMXXXXX-020 | 1 Qt. |
| Comp B | FUB2600-020 | 1 Qt. |

| 3 Mixed Gallons | | |
|---|---------------|--------|
| Comp A X2 Part numbers vary by color | CLRMXXXXX-030 | 1 Gal |
| Comp B | FUB2600-030 | 1 Gal. |

Environmental Conditions

For optimum coating performance product, substrate and ambient temperature should be between 68°F-77°F (20°C-25°C). To prevent condensation during application the surface temperature must be 5°F (3°C) or more above the dew point at all times.

Note: For use outside this range please contact your Endura Representative.

Specifications

| | | |
|---|----------------|---|
| Hardness | ASTM D3363 | 3H Plus |
| Solvent Resistance | ASTM D4752 | 100 MEK Rubs; No Failure |
| Abrasion resistance (1000 cycles CS-17) | ASTM D4060 | < 15mg loss |
| Impact resistance | ASTM D2794 | 100 in. lbs; NO failure |
| Adhesion Strength | ASTM D4541 | Pull up ; No failure between Substrate and Ceramixx > 3500psi |
| Adhesion Strength | ASTM D3002 | Cross Cut 5 (100/100) |
| Sag | ASTM D4400 | 10 mils plus using High Sag B Component |
| Service Temp | -40°F to 360°F | -40°C to 182°C |

Safety Precautions

Please refer to all Safety Data Sheets (SDS) before using this product. SDS sheets can be found on our website at www.endurapaint.com.