



Technical Data Sheet (TDS)

Product Description

Endura 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]
or
1 part by volume of component B HS [FUB2650]
(High Sag)

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

Product Characteristics

Gloss: Medium Gloss 60GU at 60 deg.

Volume Solids Mixed: Using Comp B FUB2600
73% ± 4% (depending on color)

Pot Life: 8-10 Hours at 77°F (25°C) and 50% RH
Note: Pot life is reduced when Supercat II is used.

VOC Mixed (Unreduced): (EPA Method 24):

White 120: Comp B FUB2600: 215 g/l (1.801 lb /gal)

Note: All colors are below 420 g/l (3.5 lb/gal)
VOC content will vary with each color and component B utilized.

- **Shelf Life:**
- Component A: 3 years at 77°F (25°C)
- Component B: 2 years at 77°F (25°C)

Note: For unopened product.

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.



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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.

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

Using a Ford 4 Cup (White)	
20 Seconds	Reduce as necessary*
Conventional	Airless

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: (unreduced): 4.0 – 13.5 mils
(100 – 340 microns)**

**Dry: 3.0 – 10 mils DFT (75 – 250 microns)
Note: With poor hiding colors film build may be higher**

Theoretical coverage at 1.0 mil (25 microns)
Average DFT is: 1176 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: The use of Super Catalyst II with Endura topcoats 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 sanded to achieve inter-coat adhesion with 220 – 320 grit mechanical sanding.

For questions about scheduling please contact your Endura representative.



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Clean Up

Clean all equipment immediately after use with Endura high strength gun wash, Endura epoxy reducer or Endura EX-2C thinner. Follow manufacturer's safety recommendations when using any solvent.

Ordering Information (sizing)

Available in Quarts and Gallons.

Other custom sizes may be available.

3 Quart		
Comp A X2	CLRMXXXX-020	1 Qt.
Part numbers vary by color		
Comp B	FUB2600-020	1 Qt.
Comp B HS	FUB2650-020	1 Qt.

3 Gallons		
Comp A X2	CLRMXXXX-030	1 Gal
Part numbers vary by color		
Comp B	FUB2600-030	1 Gal.
Comp B HS	FUB2650-030	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°C to +182°C -40°F to 360°F	

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.