

PRODUCT DATA SHEET: C3 155 Series Chemical Resistant Epoxy Coating

C3 155 Series **Chemical Resistant Epoxy Coating**

Product Description: **C3 155 Series** is a HAPs Free, two component, high solid, chemical resistant epoxy coating designed to provide excellent corrosion protection for steel substrates exposed to harsh chemicals. The C3 155 is formulated to develop a hard. chemically resistant film and contains an inert additive that provides improved abrasion resistance.

Features and Advantages:

- ✓ HAPs Free, Very Low VOC
- Chemically resistant to oil field production fluids, saltwater, mineral acids, organic solvents, alkaline solutions, gasoline and diesel fuel.
- Excellent water resistance, corrosion resistance and abrasion resistance.
- May be used alone as a chemically resistant lining, or chemically resistant primer. Consult with a C3 Technical Representative for specific topcoat recommendations / applications.
- Limited acid-resistant colors available

Recommended Uses: C3 155 Series is formulated for use on process tanks and equipment exposed to oilfield production fluids, saltwater brine and mixtures of petroleum fluids including some hydraulic fracturing chemical compositions.

Product Data:

Coating Type: Polyamine(s) / Epoxy VOC: 1.29 lbs. /gal (154.6 g/L) HAPs: 0.0 lbs. /gal (None)

82.1% (+/- 2%) **Volume Solids:** Weight Solids: 89.2% (+/- 2%)

Density: 11.81 +/- 0.3 lbs. /gal (mixed)

Mixing Ratio

By Volume: 1 Part A (Activator) to 4 Parts B (Base)

Recommended Film Thickness:

Atmospheric exposure: 5-8 mils Dry Film Thickness

Immersion Service: 12-16 mils Dry Film Thickness

250-450 microns DFT 11.5-20.7 mils Wet Film Thickness

288-518 microns WFT

Coverage:

1317 sq. ft. / gallon (@ 1 mil DFT 82.3 to 109.7 sq. ft. /gallon (@ 12-18 mils DFT)

Mixing: Thoroughly mix Part B Base separately for 3-5 minutes until uniform to re-disperse any pigments or solids that may have settled during shipment. An air driven power mixer (Jiffy Mixer) is recommended. Add 1 part of component A = Activator to 4 parts of component B = Base by volume and mix thoroughly for 3-5 minutes until uniform. This is a two component product and it will not dry or cure without the proper combination and amount of Part A and Part B.

Reduction: Reducer is not normally required, but if desired add 3-5% by volume of **C3 Thinner 970** to lower viscosity. Only add reducer after combining Part A with Part B.

Application: Check weather conditions before attempting exterior applications. Apply only in good weather or in areas protected from exterior environmental conditions. Air and substrate temperature must be at least 35°F or higher and should be 5°F (3°C) above the dew point and should remain steady or rising during the application and drying period. Avoid painting late in the day when air temperature decreases and the relative humidity increases toward the dew point. Water condensation on the newly painted film may cause surface imperfections and contribute to poor cure.

The preferred application method for new construction is by airless spray; however lining existing tanks may be coated using brush or roller application.

Brush and Roller – Use only natural bristle brushes. Use 1/4"-3/8" nap, phenolic or solvent resistant core, rollers. Apply in a manner to avoid excessive back brushing or back rolling over previously painted areas. Multiple coats may be required to achieve desired DFT.



PRODUCT DATA SHEET: C3 155 Series Chemical Resistant Epoxy Coating

Conventional spray – Separate air and fluid regulators are recommended. Use conventional spray equipment with a 0.070" fluid orifice and appropriate air cap and needle. Atomization air pressure should be approximately 70-85 psi; fluid pot pressure should be set as needed to deliver 12-16 fluid ounces per minute application rate.

Airless Spray – Use a 45:1 ratio or higher air driven fluid pump; gun orifice should be 0.019" – 0.021" orifice reversa-clean tips or equal. Fluid pressure should be as needed to eliminate excessive "fingering".

<u>Dry Times and Cure Schedule:</u> – Dry times = Hours @ 50% R.H. and 5-8 mils DFT. Full Cure time in Days

	50°F	77°F	90°F
To Touch:	4-5	2.5	1.5-2
To Handle:	6-7	3-4	3-4
To Recoat:	8-10	4	3-4
Full Cure: (Days)	12	5-7	4-5
Pot Life: (hours)	5-6	4	<1.0

Overcoat Interval: Minimum 3 hours- Maximum 48 hours

Note: Dry times vary depending on temperature, humidity, film build and air movement.

Note: Pot Life may be significantly shortened (< 30 minutes) at higher temperatures (95°F+). Lower temperatures will increase Pot Life and Dry Times.

Note: Chemical Cure Accelerator, **C3 Speed 815** is available for this product to speed cure under low temperature conditions. Consult with your C3 representative for proper use.

Surface Preparation: For best results, substrate should be clean, dry and free of contaminates. Remove all grease or oil from surface prior to abrasive blasting. For SSPC Environmental Zone 1B & 2A exposures, SSPC-SP6/NACE 3 Commercial Blast Cleaning Standard is acceptable. For chemical exposure or chemical immersion service, the substrate must be prepared to SSPC-SP-10/NACE 2 Near-White Blast Cleaning.

<u>Clean up:</u> Clean equipment with **C3 Thinner 970** or MEK thinner as soon as possible after application. Use hand cleaners (Goop etc.) or soap and water to remove any material from hands or skin. The use of hand and skin lotions is recommended after skin clean-up.

Shelf Life: 24 months (stored in unopened containers stored at 77°F)

<u>Packaging:</u> - This product is a two component material formulated to a **1A to 4B** volume mixing ratio.

1.25 Gallon Kit Full Quart of Part A = Activator

Full Gallon of Part B = Base

5 Gallon Kit Full Gallon of Part A = Activator

4 Gallons of Part B = Base in 5 gal pail

Health and Safety:

Keep out of reach of children.

Use with adequate ventilation.

This product contains flammable liquids. Keep away from heat, sparks or open flames. If applied in enclosed areas, provide proper air circulation to maintain exposure to solvents below the permissible levels (see SDS) or provide air supplied respirators or air supplied hoods to prevent exposure.

Avoid prolonged contact with skin and avoid exposure to spray vapors or mists. Use protective barrier cream on exposed skin to prevent contact. Persons who are hypersensitive to epoxy coatings should avoid contact with this product.

Follow the manufacturer's instructions on the proper use and maintenance of spray equipment. High pressure airless spray equipment can inject coatings into the skin and may cause serious injury.

Follow all local, state and federal regulations for the proper handling and disposal of all paint, and paint related waste generated from the use of this product.

Use only fiberglass or fire resistant filters for spray booth operations. Follow OSHA regulation 1910.107 (CFR 29) pertaining to spray finishing. Dispose of used filters according to OSHA 1910.107(b) (5) (ii) to prevent spontaneous combustion of waste materials. Information on spray paint regulations and proper disposal may be obtained at www.osha.gov.

Read and understand the Safety Data Sheet (SDS) before using this product.

Disclaimer: Information presented in this Product Data Sheet is believed to be true and accurate and is generated or obtained from accurate and reliable sources. Information is provided here only as a guide to proper product use. However, since Custom Chemicals and Coatings has no direct control over the transport, storage or application of this product, no guarantee of accuracy, completeness, fit-for- use, or ultimate performance of this product is given or implied.



