



Dry-Fall 2-K Epoxy DTM (High-Build Surface Tolerant)

**485R Series** is a 2-K surface tolerant modified polyamine epoxy Direct to Metal (DTM) Coating. Its overspray is designed to dry to a powder 10 feet from the point of application when reduced and within 20 feet without reduction. This allows painting to continue without worry of paint overspray damaging nearby equipment and vehicles. 485R Series may be applied over tightly bonded rust or mill scale and offers outstanding chemical, water, weathering, and corrosion protection. Topcoat within 60 days or surface will need to be scuffed.

<b>Vehicle Type:</b>	Polyamine Epoxy
<b>Pigmentation:</b>	Varies with Color (Zinc Phosphate)
<b>Reducers for:</b>	
Dry-Fall outside 20 ft:	No Reduction Necessary
Dry-Fall within 10-20 ft:	10% with #32-E Reducer up to 80°F 10% with #30-E Reducer above 80°F
<b>Mix Ratio:</b>	9:2 Base to Activator
<b>Pot Life:</b>	3 Hours @77°F (Decreases in higher temps)
<b>Volume Solids:</b>	45%
<b>Theoretical Coverage:</b>	720 ft <sup>2</sup> /gal. @ 1 mil DFT
<b>VOC:</b>	<335 g/L
<b>Flash Point:</b>	24°F (Lowest Flashing Component)
<b>Recommended DFT:</b>	4-8 mils DFT = 10-20 wet mils

<b>Dry-time:</b>	
<b>Recoat/Topcoat</b>	Min: 1-2 hrs. Max: 60 Days
<b>Tack Free:</b>	30 Minutes
<b>Dry Hard:</b>	2-3 Hours
<b>Complete Cure:</b>	5-7 Days @ 77°F
<b>Put in Service</b>	24 Hours
<b>Shelf Life:</b>	1 Year Minimum
<b>Finish:</b>	Flat
<b>Color:</b>	Full Range

**Surface Preparation**

- 1) For immersion or under insulation (CUI), a SSPC-SP5 White Metal Blast is recommended. Commercial Blast SSPC-SP6 is recommended for steel when practical. Where blast cleaning is not practical, SSPC-SP3 Power Tool or SSPC-SP2 Hand Tool Cleaning is acceptable and provides excellent results. Also, Water Jetting in accordance with SSPC-SP12 is acceptable.
- 2) All surfaces to be painted should be dry and free of all foreign contaminants.

**Mixing Instructions and Reduction**

Mix 2 Parts “A” Activator with 9 Parts “B” Base. Allow a minimum 15 minute induction period before reduction. No reduction is necessary to achieve Dry-Fall properties at 20 feet. For Dry-Fall effect within 10-20 feet you must reduce **activated** material 10%. Reduce with one of the following Highland Exempt Reducers:

**30-E** Highland VOC Exempt Warm Weather Dry-Fall Reducer for temperatures 80°F and above.

**OR:**

**32-E** Highland VOC Exempt Cold Weather Reducer for temperatures below 80°F.

In extremely hot weather (+90°F), **#36-E** Blending Reducer may be used to help overspray blend in. Do not exceed 5% reduction. **If “Fingering” occurs during the spray application, increase the amount of thinner which will decrease the viscosity of the coating. Do not increase the pump pressure. Maintain 1800 psi allowing +/- 25 psi for surges.**

**Application Requirements**

To assure Dry-Fall effect, do not apply in temperatures below 45°F, on surfaces below 40°F, or humidity above 85% Rh. When humidity is above 50%, take caution to observe the dry-fall range as it may extend slightly past the 20 foot mark, up to 50 feet depending on other weather variables. **Make sure the equipment being used will give accurate psi readings so the pressure from the pump can be maintained at 1800 psi allowing a maximum +/- 25 psi for surges.** The product will continue curing to temperatures of 30°F. Do not apply in temperatures that are 5°F or less from the dew point. Contact a Highland representative to further review your specific spray conditions.

**Method of Application**

**Airless Gun:** Graco 205-591  
**Pump:** 30:1/45:1/60:1, Gas Pump is Acceptable  
**Tip Range:** 3.011 – 4.015  
**Pump Pressure:** 1800 psi allowing +/- 25 psi for surges  
**Hose:** 3/8 inch ID

**Brush or Roller:** Reduce 10% min with #105 B&R Reducer  
**Clean Up:** #30-E, #32-E or 1:1 Blend MEK & Xylene

**NOTE:** **Electric pumps are NOT recommended. Contact a Highland Representative to review the use of conventional guns.**

**Safety Precautions**

- 1) Use normal precautions such as gloves, facemasks and barrier creams.
- 2) Adequate ventilation must be maintained. In confined areas, workmen must wear constant flow airline respirators.
- 3) If product comes into contact with skin, wash thoroughly with lukewarm water or diluted Boric Acid, and obtain immediate medical attention.
- 4) This product contains **FLAMMABLE** materials. Keep away from sparks and open flames. Observe **NO SMOKING** regulations.
- 5) All electrical equipment and installations should conform to NEC regulations. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools, and to wear conductive, non sparking shoes.
- 6) Observe low flash regulations.
- 7) Refer to Material Safety Data Sheet (MSDS) for complete safety instructions.

The technical data listed herein has been compiled for your convenience and guidelines are based upon our experience and knowledge. However, since we have no control over the use of this information or this product, no warranty expressed or implied is intended or given. Highland assumes no responsibility whatsoever for coverage, performance or any other damage, including injuries from use of this information or products recommended herein.