



**CureUV 511043 UV
Curable Clear Coating
for Roofing Tiles**

Technical Data Sheet

Date: 8/22/19

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1.0 SDS Information

A safety data sheet is readily available to all those having potential contact with the product. The SDS should be held in file for reference purposes as specified by the OSHA Worker Right to Know Requirements.

2.0 Scope

CureUV 511043 is a Urethane Acrylate UV curable coating that is low in volatile organic compounds (VOC's) and zero in hazardous air pollutants (HAP's). It exhibits excellent adhesion to metal surfaces. **CureUV 511043** is typically pigmented but can be supplied as a clear coating and surface gloss can be modified. It exhibits very good flexibility and excellent corrosion resistance. The target market for this product has been for Direct to Metal (DTM) applications, although it has been used successfully in other areas. It is recommended that it be applied by spray, dip, flow, or roll coating methods, although other methods may be appropriate.

3.0 Material Properties

The following are target properties, not specifications.

3.1 Physical Properties

3.1.1	Non-Volatiles, wt. %:	> 97
3.1.2	Density, lb/gal:	8.75-11.25
3.1.3	Brookfield Viscosity, cps: (# 4 spindle, 20 rpm, 21° C)	400-500
3.1.4	Surface Tension, dynes/cm:	Not Determined
3.1.5	VOC	
	EPA Method (less water), lb/gal:	0.25 max
	Actual wt. %:	2.87 max
	Actual, lb/gal:	0.25 max
3.1.6	HAP, lb/lb:	0.00
3.1.7	UVA Cure Dose, mJ/cm ² (0.5-2.0) mil application thickness)	400-1000

3.2 Other product information

3.2.1 Recommended Wet (and resulting dry) film thickness: 0.5 mil – 2.0 mils

3.2.2 Cleanup:

wet coating	Absorb using appropriate media and use acetone or isopropanol to remove remainder with absorbent wipe. Dispose of in accordance to national, state and local regulations
dry coating	will be insoluble and may be disposed of as solid waste.



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3.2.4 Material supplied “ready to use”. In the event reduction is desired, the use of acetone is recommended. It is strongly suggested to contact Van Technologies for information concerning any corrective, and/or modifying actions.

4.0 Finish Performance Data (As applied as both seal and topcoat)

Recommended Usage

For direct to metal surfaces, interior or exterior use. Uses include conduit, piping, decorative steel panels, golf shafts and other steel/metal surfaces.

Characteristics

Hard surface, highly crosslinked composition having excellent impact resistance, chemical resistance and abrasion resistance. UV curable, near zero VOC and near zero HAP, non-flammable.

Quick Reference Table:

Characteristics	Ranking
Household Chemicals	5
Abrasion Resistance	5
Moisture Resistance	5
Build/Solids	5
Dry Time	5
Yellowing	5
Repairability	2

Key: 1 = Poor 2 = Fair 3 = Good 4 = Very Good 5 = Excellent

5.0 Process requirements:

5.1 Dry/Cure for a 1.25 mil wet film thickness (1.25 mil DFT)

5.1.1 UVA Cure Dose (EIT Power Puck Radiometer) establishes dose for cure to be between 500-600 mJ/cm²

5.2 Application Equipment Recommendations:

5.2.1 Spray Gun/tip Options:

5.2.1.1 Graco Compliant with HVLP Air Cap with 0.030 tip, 10-15 psi fluid pressure, 30 psi atomizing pressure



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5.2.1.2 Binks HVLP – #92 tip (0.034”), #97P air cap, 10 psi fluid pressure, 45 psi atomizing pressure

5.2.2 Review UV Tech Tips for other equipment recommendations.

**** Do not apply when ambient temperature is < 60 F**

5.3 Shipping/Stacking of Parts:

Parts may be stacked and packaged immediately after cure.