

# **CureUV Curable Coating for Multiple Surfaces**

**Technical Data Sheet** 

Date: 1/23/19

Page 1 of 3

#### 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 Curable Coating for Multiple Surfaces is an Epoxy Acrylate UV curable wood coating that is near zero in volatile organic compounds (VOC's) and zero in hazardous air pollutants (HAP's). It can be used as its own sealer and has excellent adhesion when applied over itself when intermediate sanding is performed. Moderate viscosity, high solids UV coating that exhibits excellent flow and leveling. It also exhibits uniform coverage when applied over a sealed wood surface. The gloss level can be controlled between 15% to 95% (60°) per customer requirements to accommodate specific applications. The surface abrasion resistance may be enhanced with the addition of ceramic ingredients that provide superior hardwood floor finish quality. It is recommended that it be applied by roll coat method although other methods may be appropriate.

> 97

### **Material Properties**

**3.0** The following are target properties, not specifications.

Non-Volatiles, wt.%:

## 3.1 <u>Physical Properties</u>

3.1.1

3.1.2	Density, lb/gal:	10.0 - 11.0
3.1.3	Brookfield Viscosity, cps:	1500 – 4000
	(# 4 spindle, 20 rpm, 21° C)	
3.1.4	Surface Tension, dynes/cm:	36.0 - 45.0
3.1.5	VOC	
	EPA Method (less water), lb/gal:	0.15
	Actual wt.%:	1.47
	Actual, lb/gal:	0.15
3.1.6	HAP, lb/lb:	Zero
3.1.7	UVA Cure Dose, mJ/cm <sup>2</sup>	225 - 350
	(1.25 mil application thickness)	

#### 3.2 Other product information

3.2.1 Recommended Wet (and resulting dry) film thickness: 0.25 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



# **CureUV Curable Coating for Multiple Surfaces**

**Technical Data Sheet** 

Date: 1/23/19

Page 2 of

dry coating

national, state and local regulations will be insoluble and may be disposed of as solid waste.

3.2.3 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 <u>Finish Performance Data</u> (As applied as both seal and topcoat)

#### **Recommended Usage**

For all wood surfaces, interior use, commonly used on floors, kitchen cabinets (complies with KCMA test standards), furniture, doors, home accessories, etc.

#### **Characteristics**

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

#### **Quick Reference Table:**

Characteristics

Key: 1 = Poor	2 = Fair	3 = Good	4 = Very Good	5 = Excellent
Repairability		2		
Yellowing		4		
Dry Time		5		
Build/Solids		5		
Moisture Resistance		5		
Abrasion Resistance		5		
Household Chemicals		5		

Ranking

#### 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 250 350 mJ/cm<sup>2</sup>
- 5.2 Application Equipment Recommendations:
  - 5.2.1 Roll Coat Options:



# **CureUV Curable Coating for Multiple Surfaces**

**Technical Data Sheet** 

Date: 1/23/19

Page 3 of

- 5.2.1.1 A 30 to 40 durometer applicator roll is recommended for general finishing
  - 5.2.1.1.1 Direct or reverse methods and doctor roll nip gap adjustment will influence surface texture appearance
  - 5.2.1.1.2 Harder durometer applicator rolls may be used to also adjust surface texture appearance.
- \*\* Do not apply when ambient temperature is < 60 F
- 5.3 Shipping/Stacking of Parts:
  Parts may be stacked and packaged immediately after cure.

### 6.0 Supportive Data

**Taber Abrasion Test Results:** 

Note: The testing performed used CureUV Curable Coating for Multiple Surfaces 30 sheen material and did not contain any ceramic additive. The test results are comparable to performance standards necessary for the hardwood flooring industry. The addition of ceramic additives will result in even better abrasion resistance if so desired.

**Taber Industries Model 5135** 

- 500 g weights
- S-42 Sandpaper strips fastened to S-32 Rubber Wheels (same as CS-0) Paper changed every 500 cycles.
- Debris was brushed off sandpaper every 100 cycles during testing
- 100% vacuum

