1.0 MSDS Information

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

2.0 Scope

GL-5891 is a Polyester/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 as it is very sandable and has excellent adhesion when applied over itself. **GL-5891** is a low viscosity, 100% solids UV coating that exhibits excellent flow and leveling. It also exhibits uniform coverage when applied over a sealed wood surface. The gloss level of the **GL-5891** can be controlled between 15% to 95% (60°) per customer requirements to accommodate specific applications. It is recommended that it be applied by spray or vacuum coating methods although other methods may be appropriate.

3.0 Material Properties

The following are target properties, not specifications (for GL-5891 semi-gloss).

3.1 Physical Properties

3.1.1	Non-Volatiles, wt.%:	> 99
3.1.2	Density, lb/gal:	8.90 – 9.30
3.1.3	Brookfield Viscosity, cps: (# 2 spindle, 20 rpm, 21° C)	100 - 200
3.1.4	Surface Tension, dynes/cm:	34.0 – 38.0
3.1.5	VOC	
	EPA Method (less water), lb/gal:	0.04
	Actual wt.%:	0.42
	Actual, lb/gal:	0.04
3.1.6	HAP, lb/lb:	Zero
3.1.7	UVA Cure Dose, mJ/cm^2 (1.25 mil application thickness)	200 – 250

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.

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

Recommended Usage
For all wood surfaces, interior use, commonly used on moulding and millwork, doors, siding, floors, 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	Ranking
Household Chemicals	5
Abrasion Resistance	5
Moisture Resistance	5
Build/Solids	5
Dry Time	5
Yellowing	4
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 200 – 250 mJ/cm^2

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

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.

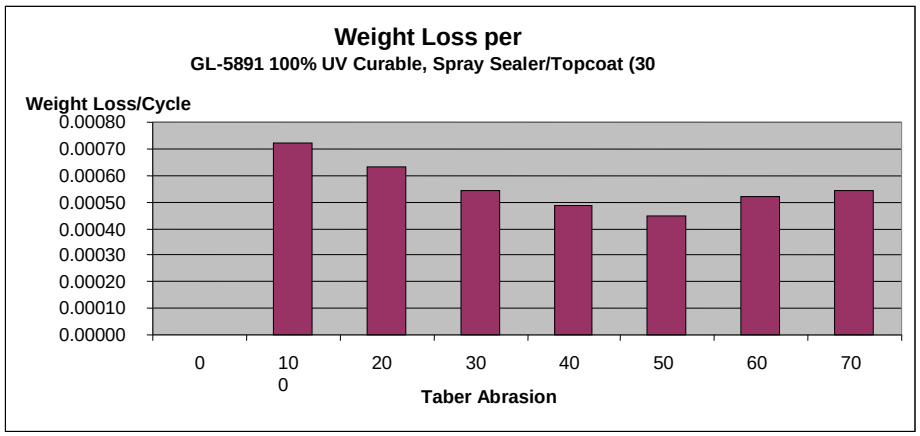
6.0 Supportive Data

Taber Abrasion Test Results:

Note: The testing performed used GL-5891 30 sheen material and did not contain any ceramic additive. The test results are comparable to performance standards necessary for the hardwood flooring industry.

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



Average weight loss per cycle = 0.000556 gm