

VBASE® Base Oils: Coating Compatibility Data

Coating compatibility was carried out in accordance with two industry recognized paint immersion tests. Both tests utilize epoxy coatings with the test data for the **Caterpillar** method in Tables 1-3 and the **John Deere** method in Tables 4-6.

Caterpillar Fluid Immersion Resistance Testing: Caterpillar 1E1952 [500hrs. at 25±2°C]

Table 1. Coating Application Conditions

Paint Process: Valspar EEEY0148 ADFD Fast Cure Epoxy	
Batch Number	50106113
Flash Time	10 Minutes
Flash Temperature	Room temperature
Bake Time	30 Minutes
Bake Temperature	180°F
Film Build	1.49 mils

Table 2. Coating Thickness Assessment and Visual Inspection Ratings

ID	Total Film Thickness (mm)	Corrosion Rating		Blister Rating		
		Grade	Distribution	Size	Frequency	Pattern
68SLV-1	0.041	10	None	10	None	None
68SLV-2	0.040	10	None	10	None	None
68SLV-3	0.040	10	None	10	None	None
68U-1	0.042	10	None	10	None	None
68U-2	0.043	10	None	10	None	None
68U-3	0.037	10	None	10	None	None

Table 3. Crosshatch Adhesion and Scratch Hardness Test Rating

ID	Adhesion Rating (Primer to Substrate)	Gouge Pencil Hardness
68SLV-1	5B, 5B, 5B	5H
68SLV-2	5B, 5B, 4B	5H
68SLV-3	5B, 5B, 5B	>6H
68U-1	5B, 5B, 5B	>6H
68U-2	5B, 5B, 5B	>6H
68U-3	5B, 5B, 5B	5H

EU Ecolabel LuSC-List



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John Deere Fluid Resistance Testing: John Deere JDM F17 [24hrs. at 23±3°C]

Table 4. Coating Application Conditions

Primer Paint Process: Sherwin Williams EEA1053	
Batch Number	50303113
Flash Time	10 Minutes
Flash Temperature	Room temperature
Bake Time	30 Minutes
Bake Temperature	150°F
Film Build (Audit Panel)	1.99 mils
Topcoat Paint Process: Sherwin Williams KYP1692	
Batch Number	50303113
Flash Time	10 Minutes
Flash Temperature	Room temperature
Bake Time	30 Minutes
Bake Temperature	180°F
Film Build (Audit Panel)	1.66 mils

Table 5. Coating Thickness Assessment, Visual Inspection Ratings, and Scratch Hardness

ID	Total Film (mils)	Visual Examination	Thumbnail Softening	Pencil Hardness	
				Initial	Final
68SLV-1	3.5	None	None	4H	4H
68SLV-2	3.7	None	None	4H	4H
68SLV-3	3.9	None	None	4H	4H
68U-1	3.8	None	None	4H	4H
68U-2	3.6	None	None	4H	4H
68U-3	3.7	None	None	4H	4H

Table 6. Visual Coating Gloss Rating

ID	20° Specular Gloss		
	Initial	Final	Change
68SLV-1	77.9	78.1	+0.2
68SLV-2	78.6	79.5	+0.9
68SLV-3	79.1	78.2	-0.9
68U-1	77.0	75.9	-1.1
68U-2	80.0	78.9	-1.1
68U-3	78.0	76.9	-1.1

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