

**HYSOL[®]****EE0149 EE1067 EE1068 –****HD3561****Electronic Formulated Liquid***Formerly Dexter***Room Temperature Cure, Flame-Out Casting Systems**

EE0149/HD3561 Black

EE1067/HD3561 Off White

EE1068/HD3561 Black

Description

Casting compounds EE0149 and EE1067 (EE1068) using hardener HD3561 have been formulated to meet the needs for flame-out, easily handled casting systems. The cured systems are non-burning or self-extinguishing according to ASTM D 635 and meet the U.L. requirements for 94V-0. EE1068 is the black version of EE1067.

EE0149 with hardener HD3561 is formulated to be a low cost casting system and is listed in Underwriter's Laboratory Component Index. EE0149 meets the requirements of UL 94V-0 in ¼" cross section and 94HB in 0.080" cross-section.

These products are recommended for potting modules. Modules potted in EE1067 with HD3561 have been used over the temperature range of +130°C to –65°C (+266°F to –85°F).

Typical Uncured Properties	EE0149	EE1067/HD3561 EE1068	Test Method	
Color	Black	Off white/ Black	Amber	Visual
Filler content, %	51	40	0	STP 3A
Specific Gravity @ 25°C (77°F)	1.56	1.65	1.01	STP 9A
Viscosity @ 25°C (77°F) Brookfield RVF				STP 2A
Spindle 5, Speed 10 cps	17,000			
Spindle 6, Speed 20 cps		30,000		
Spindle 1, Speed 20, cps, max			20	
Shelf Life @ 25°C (77°F), months min. from date of shipment	6	6	12	
Solids Content, %	100	100	100	

Typical Cured Properties – Values are not intended for use in preparation of specifications. All measurements are taken at 25°C (77°F) unless otherwise noted.

Cured Physical Characteristics

	EE0149 /HD3561	EE1067/ EE1068/ Test /HD3561	Method
Color	Black	Off White/ Black	Visual
Coefficient of linear thermal expansion in/in/°C, (30° to 40°C) x 10 ⁻⁶ (110° to 130°C) x 10 ⁻⁶	57 165	70 225	STP65B
Compressive strength, psi	11,800	12,600	STP 92A
Density, gm/cc	1.54	1.59	STP 9A
Filler Content, %	45	34	STP 3A
Flexural strength, psi	10,300	13,500	STP 39A
Flammability	Pass	Pass	UL 94V-0
Linear shrinkage, %	.47	0.10	STP 56C
Moisture absorption (24 hr immersion), %	0.27	0.8	STP 109A
Tensile strength, psi	4,970	6,600	STP 38A
Thermal conductivity, @ 30°C (cal x cm/sec x cm ² x °C) x 10 ⁻⁴	12	8.7	STP 47C
Hardness, Shore D	90	88	STP 11A
Elongation, %	1.3	1.7	STP 38A
Glass Transition Temperature, °C	48	50	STP 65B

Cured Electrical Properties

	EE0149 /HD3561	EE1067/ EE1068/ Test /HD3561	Method
Dielectric strength @ 10 mil thickness volts/mil	1285	1330	STP 48D
Arc Resistance, seconds	134	97	STP 48E

	EE0149/HD3561				EE1067/EE1068/HD3561			
	25°C		85°C		25°C		85°C	
	K	D	K	D	K	D	K	D
100 Hz	4.8	.019	8.0	.233	4.7	.013	8.3	.088
1 kHz	4.7	.013	7.1	.077	4.7	.012	7.7	.048
10 kHz	4.6	.017	6.5	.057	4.6	.018	7.1	.067
Vol. Res.	5 x 10 ¹⁵		2 x 10 ¹²		3 x 10 ¹⁶		4 x 10 ¹²	
Surf. Res.	4 x 10 ¹⁵		1 x 10 ¹²		2 x 10 ¹⁶		1 x 10 ¹³	

K = Dielectric constant by STP 53A

D = Dissipation factor by STP 53A
Vol. Res. = Volume resistivity in ohm-cm by STP 31A
Surf. Res. = Surface resistivity in ohms by STP 31A

Handling	EE0149/HD3561	EE1067/EE1068/ HD3561
Mix ratio, parts by weight	100/13	100/15
Mix Ratio, parts by volume	100/20	100/24.5
Pot life @ 25°C (77°F) (200 gram mass), hours	2	1.5
Viscosity @ 25°C (77°F) Brookfield RVF, cps	1,800	1,000
Peak Exothermic Temperature (115 gram mass), °C (°F)	75 (167)	53 (125)

Cure Schedule

Recommended cure Three hours at 60°C (140°F)
Alternate cure Two days at 25°C (77°F)

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For additional information in the Americas, please contact one of the following locations:

New York	Canada	Brazil
TEL: 716.372.6300	TEL: 905.814.6511	TEL: 011.55.11.4143.7000
FAX: 716.372.6864	FAX: 905.814.5391	FAX: 011.55.11.4143.7100

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Users should review the Material Safety Data Sheet (MSDS) and product label for the material to determine possible health hazards, appropriate engineering controls and precautions to be observed in using the material. Copies of the MSDS and label are available upon request
