



**TOXIC GAS TESTING ON PHENOLIC LAMINATE**

Toxic Gas generation per BSS 7239 specification  
 Materials Tested: Glass Phenolic 7781, .035" thick

**Test Results:**

	Specimen #1	Specimen #2			
Weight (g)	8.7	8.7			
Gas	Corrected PPM	Corrected PPM	Average PPM	STD. Deviation PPM	Specification Maximum *
CO	2486	1016	1751.0	1039.447	3500
HCN	<1	<1	<1	<1	150
SO <sub>2</sub>	<1	<1	<1	<1	100
HCL	<1	4.78	<2.9	<3.380	500
HF	8.90	3.52	6.2	3.804	200
NOx	1.70	4.34	3.0	1.867	100
Ambient Temperature: 71.7 deg. F Relative Humidity: 23% Barometric Pressure: 29.7 Inches of Mercury					

- BSS 7239 is a test procedure and as such has no pass or fail criteria. The specification criteria listed are typical for the transportation industry and are listed for reference purposes only.

**SURFACE FLAMMABILITY TESTING ON PHENOLIC LAMINATE**

Surface Flammability of Materials Using Radiant heat source per ASTM E-162

<u>TEST RESULTS</u>		PERFORMANCE CRITERIA
Average Flamespread Factor (FS) =	1.00	
Average Heat of Evolution (Q) =	3.73	
Average Flamespread Index (Is) =	5.00	Is ≤ 35
Flamespread Index Range (Is) =	2.94 to 5.22	

**SPECIFIC OPTICAL DENSITY OF SMOKE TESTING ON PHENOLIC LAMINATE**

Specific Optical Density of Smoke Generated by Solid Material per ASTM E-662

	<u>TEST RESULTS</u>		PERFORMANCE CRITERIA
	Non-Flaming	Flaming	
Ds @ 1.5 min. (average):	0.0	0.0	Ds @ 1.5 min. ≤ 100
Ds @ 4.0 min. (average):	0.1	0.1	Ds @ 4.0 min. ≤ 165
Dm (average):	4.6	2.7	
Dm (corr) (average):	4.1	2.7	

**Note:** During the Flaming mode, specimens did not ignite.