SMP 800-C TOXIC GAS TESTING FOR QUANTUM TECHNICAL ON PRECIDIUM MTI RAIL FLOOR VTEC #100-4174-1 TESTED: OCTOBER 11, 2012



# **VTEC** Laboratories Inc.

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Client: Quantum Technical 15 Riel Drive St. Albert, AB T8N 3Z2 CANADA

Attention: Mr. Shawn Chizen

# <u>Subject:</u>

Measure amount of toxic gas generation per SMP 800-C specification.

### **Test Description:**

The gas analysis was made after 4 minutes of exposure to 2.5 w/cm<sup>2</sup> of radiant heat in the flaming and non-flaming modes. Colorimetric Gas Detector Tubes were used in the toxic gas analysis.

### Disclaimer:

This test result alone does not assess the fire hazard of the material, or a product made from this material, under actual fire conditions. Consequently, the results of this test alone are not to be quoted in support of claims with respect to the fire hazard of the material or product under actual fire conditions. The results when used alone are only to be used for research and development, quality control and material specifications.

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# Material Tested:

- Product Description: 1)
- 2) Supplier:
- Color: 3)

**Results:** 

- Specimen Composition: 4)
- Average Thickness: 5)

# Precidium MTI Rail Floor Quantum Technical Grey Coated on 0.24" Steel 0.34 in.

Sample Weight (g)	294.5	297.8	297.4	296.4	294.8	295.6			
	Non-flame Mode CORRECTED PPM			Flaming Mode CORRECTED PPM			AVERAGE PPM	STD. DEVIATION PPM	Critical Concentration PPM
GAS	#1	#2	#3	#4	#5	#6			
со	10	10	10	400	500	400	221.7	234.73	3,500
HCN	0	0	0	25	20	20	10.8	12.01	100
SO <sub>2</sub>	0	0	0	0	0	0	0.0	0.00	100
HCI	0	0	0	5	6	6	2.8	3.13	500
HF	0	0	0	0	0	0	0.0	0.00	100
(NO+NO <sub>2</sub> ) NO <sub>X</sub>	1	0	1	79	76	64	36.8	39.94	100
CO <sub>2</sub>	1,800	2,000	1,800	10,000	8,500	9,500	5,600	4,118.7	90,000
HBr	0	0	0	1	2	1	0.7	0.82	100
				•			•		
AMBIENT TEMPERATURE:				74.9 deg. F					
RELATIVE HUMIDITY:				38%					
BAROMETRIC PRESSURE:				29.9 Inches of Mercury					

**Conclusion:** The material tested met the critical concentration requirements of SMP 800-C.

Neil Schultz **Executive Director** 

Amirudin Rahim **Technical Director**