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MR21 Series Outgassing Data

TECHNICAL BULLETIN 104

OUTGASSING TEST REPORT

per

ASTM E595-07

ASTM E595-07 Outgas Testing

Type of Test:	Determination of TML, CVCM and WVR From Thermal Outgassing	
Material Description:	Supplied Rubber Material	
Part No / Lot / Serial / Batch :	P/N # MAST MR21	
Specification / Rev:	ASTM E-595-07	
Test Procedure	ASTM E-595-07	
Specimen Condition:	Pre Condition: 73F / 50% RH (24 hours) Post Condition: 73F / 50% RH (24 Hours)	
Test Parameters:	Outgas 24 Hours @ +257 +/-2F under vacuum of 5 x 10 ⁻⁵ or less Torr	
Test Performed By:	Ryan Miller	Date of Test: 11/02/11 – 11/07/11

Specimen Data (1): P/N #MAST MR21

Test No.	1	2	3	Blank		
Compartment No.	1	2	3	4		
"Initial" Collector Mass (mg)	1857.095	2078.461	2009.924	2032.635		
"Initial" Boat Mass (mg)	224.628	228.963	257.144			
"Initial" Boat+Specimen Mass (mg)	434.728	452.667	489.164			
"Conditioned" (73°F / 50% RH / Minimum of 24 Hrs) Boat+Specimen Mass (mg)	434.766	452.706	489.204			
"Post Outgassing" (Cooled to RT in Desiccator) Boat+Specimen Mass (mg)	434.307	452.209	488.719			
"Post Outgassing" (Cooled to RT in Desiccator) Collector Mass (mg)	1857.277	2078.634	2010.086	2032.687		
WVR "Post Conditioned" (73°F / 50% RH / 24 Hrs) Boat+Specimen Mass (mg)	434.389	452.310	488.809			
					Average	Limits
Total Mass Loss (% TML)	0.218	0.222	0.209		0.217	1.00%
Collected Volatile Condensable Materials (% CVCM)	0.087	0.077	0.070		0.078	0.10%
Water Vapor Regain (% WVR)	0.039	0.045	0.039		0.041	Report

This material MET the ASTM E-595-07 specification requirements.

Equipment Item:	Size / Type	Control No.	Calibration Due
Microbalance:	Sartorius	1210	02-18-12
Vacuum Outgassing Unit:	Varian 3118	1481	N/A
Ionization Gauge Controller:	CHA Industries	1267	08-04-12
Temperature Controller:	Watlow	1728	07-15-12
Over Temp Safety Controller:	Watlow	1729	07-15-12
Temperature Controller:	Watlow	1164	07-15-12
Over Temp Safety Controller:	Watlow	1927	07-15-12
Temperature Recorder	Omega	2260	07-15-12