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AIR CLEANER TEST REPORT

Manufacturer: Philips Plastics

Product Name: GSC1 & 2

RTI Report No. AW03180501

Test Laboratory:

RTI

3040 Cornwallis Road

Research Triangle Park, NC 27709

919-541-6941

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Air Cleaner Performance Report Summary

This report applies to the tested device only.

Laboratory Data

RTI Report No.	AW03180501	Date	3-18-05	
Test Laboratory	Research Triangle Institute			
Operator	Clayton	Supervisor	Owen/Hanley	
Particle Counter(s):	Brand	Climet	Model	500

Device Manufacturer's Data

Manufacturer	Philips Plastics			
Product Name	GSC1 & 2			
Product Model				
Test requested by	Philips Plastics			
Sample obtained from	Philips Plastics			
Catalog rating:	Airflow rate	NA	Initial dP (in. wg)	NA
Specified test conditions:	Airflow (cfm)	600	Final dP (in. wg)	NA
	Face Velocity (fpm)	216		

Device Description

Nominal Dimensions (in.):	20 x 20 x 2	(height x width x depth)		
Generic name	baffle/packed bed	Media color	Chrome metal	
Amount and type of adhesive	NA			
Other attributes	metal baffles followed by packed bed, side and handle holes covered by duct tape			

Test Conditions

Airflow (cfm)	600	Temperature (F)	73, 71	RH (%)	50, 57
Face Velocity (fpm)	216	Final Pressure Drop (in. wg)	NA		
Test aerosol type:	KCI				
Remarks					

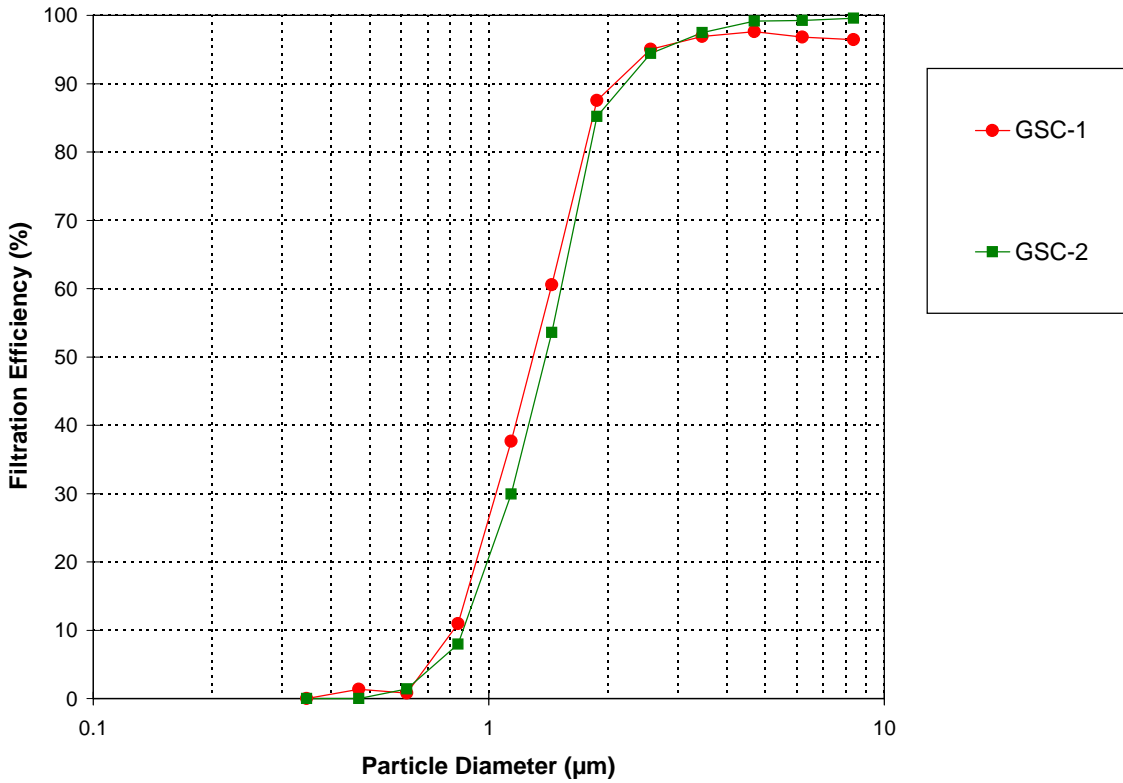
Resistance Test Results

Initial resistance (in. wg)	2.15, 1.90	Final resistance (in. wg)	NA
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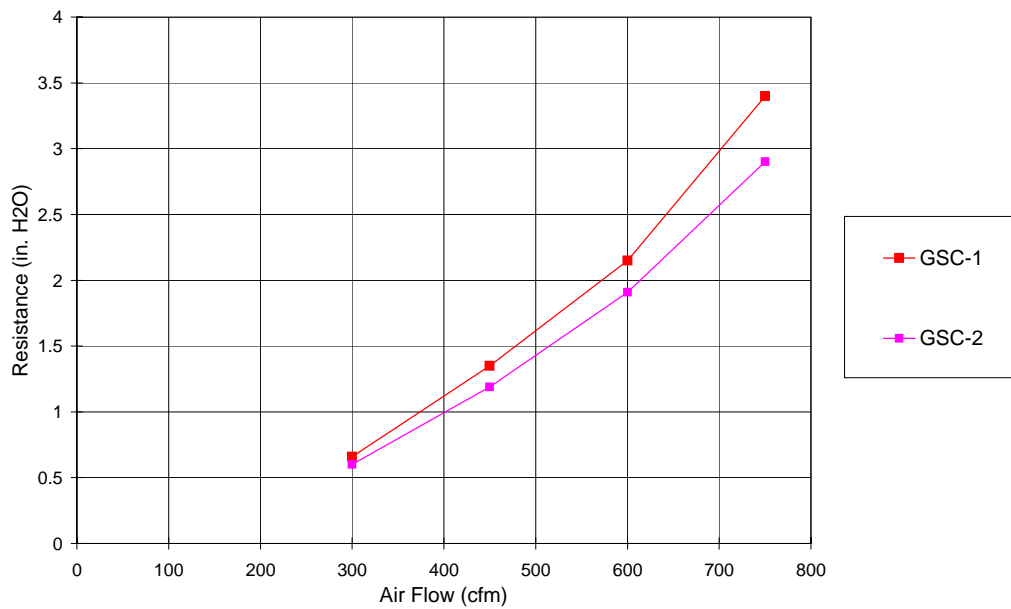
Minimum Efficiency Reporting Data

Composite average efficiencies	E1	3, 2	E2	70, 66	E3	97, 99
Air cleaner average Arrestance per Std 52.1:	NA					
Minimum efficiency reporting value (MERV) for the device:	NA @ 600 cfm					

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Resistance to Airflow



TABULATED DATA SUMMARY
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Summary of Test Conditions:

Product Manufacturer	Philips Plastics
Product Name	GSC1 & 2
Nominal Dimensions (in.)	20 x 20 x 2
Airflow (cfm)	600
Final Resistance (in. H2O)	NA

Efficiency (%) per Indicated Size Range

OPC Channel Number	1	2	3	4	5	6	7	8	9	10	11	12
Min. Diam. (µm)	0.3	0.4	0.55	0.7	1	1.3	1.6	2.2	3	4	5.5	7
Max. Diam. (µm)	0.4	0.55	0.7	1	1.3	1.6	2.2	3	4	5.5	7	10
Geo. Mean Diam (µm)	0.35	0.47	0.62	0.84	1.14	1.44	1.88	2.57	3.46	4.69	6.20	8.37

	Run No.												
GSC-1	AW03180503	0	1	1	11	38	61	88	95	97	98	97	96
GSC-2	AW03180502	0	0	1	8	30	54	85	94	97	99	99	100

	GSC-1	GSC-2
E1 =	3	2
E2 =	70	66
E3 =	97	99

MERV *= 11 11

*if a full ASHRAE 52.2 test at an approved flowrate gave these minimum efficiency values.

Resistance to Airflow:

	Airflow	(%)	50	75	100	125
	Airflow	(m3/s)	0.142	0.212	0.283	0.354
	Airflow	(cfm)	300	450	600	750
	Air Velocity	(fpm)	108	162	216	270
	Air Velocity	(m/s)	0.549	0.823	1.097	1.372
GSC-1	Resistance	(in. H2O)	0.66	1.35	2.15	3.40
	Resistance	(Pa)	164	336	535	846
GSC-2	Resistance	(in. H2O)	0.60	1.19	1.91	2.90
	Resistance	(Pa)	149	296	475	722