



National Institute for Occupational Safety and Health
National Personal Protective Technology Laboratory
Technology Evaluation Branch
Certification, Evaluation and Testing Section
P.O. Box 18070
Pittsburgh, PA 15236

TEST REPORT

Task Number: TN-17685

Manufacturer: Makrite Industries, Inc.

Prepared by: Jeremy Brannen

Tests Conducted by: Jeremy Brannen

Date: March 30, 2011

Respirator Tested: 9500-N95

Background Information

In an application accepted March 8, 2011 Makrite Industries requested an approval of the model 9500-N95 filtering facepiece air purifying respirator for protections against particulates at a N95 filter efficiency level, reference the assembly matrix MAK1105AM1.xls.

Tests Assigned

<u>Test Description</u>	<u>STP Number</u>	<u>Reference</u>
A. Exhalation Resistance Test	RCT-APR-STP-0003	84.180
B. Inhalation Resistance Test	TEB-APR-STP-0007	84.180
C. Sodium Chloride (NaCl) N95 Test	TEB-APR-STP-0059	84.181

Overall Results

The items tested passed laboratory testing.

Individual Test Results

See attached test data sheets.

National Institute for Occupational Safety and Health
Respirator Branch
Test Data Sheet



Task Number: TN-17685

Reference No.: CFR 84.180

Test: Exhalation Resistance Test

STP No.: 3

Manufacturer: Makrite Industries, Inc.

Filter Type: Filter Only

Item Tested: 9500-N95

Sample	Maximum Allowable Resistance (MM of H2O)	Actual Resistance (MM of H2O)	Result
	Exhalation	Exhalation	
1	25	5.6	PASS
2	25	5.3	PASS
3	25	5.6	PASS

Overall Result: PASS

Comments:

Was all equipment verified to be in calibration throughout all testing?

☒ Yes ☐ No

Signature:

Engineering Technician

Date: 3/30/2011

National Institute for Occupational Safety and Health
Respirator Branch
Test Data Sheet



Task Number: TN-17685

Reference No.: CFR 84.180

Test: Inhalation Resistance Test

STP No.: 7

Manufacturer: Makrite Industries, Inc.

Item Tested: 9500-N95

Filter Type: Filter Only

Sample	Maximum Allowable Resistance (MM of H2O)	Actual Resistance (MM of H2O)	Result
	Inhalation	Inhalation	
1	35	6.9	PASS
2	35	6.9	PASS
3	35	6.9	PASS

Overall Result: PASS

Signature:

A handwritten signature in black ink, appearing to read "Jeremy B. Danner". The signature is written over a horizontal line.

Date: 3/30/2011

Engineering Technician

Task Number: TN-17685

Reference No.: CFR 84.180

Test: Inhalation Resistance Test

STP No.: 7

Manufacturer: Makrite Industries, Inc.

Item Tested: 9500-N95

Comments:

Was all equipment verified to be in calibration throughout all testing?



Yes



No

Signature:



Engineering Technician

Date: 3/30/2011

National Institute for Occupational Safety and Health
Respirator Branch
Test Data Sheet



Task Number: TN-17685

Reference No.: CFR 84.181

Test: Sodium Chloride (NaCl) - N95

STP No.: 59

Manufacturer: Makrite Industries, Inc.

Item Tested: 9500-N95

Filter	Flow Rate	Initial Filter Resistance	Maximum Allowable Percent Leakage	Initial Percent Leakage	Maximum Percent Leakage	Result
1	85	7.8	5.00	0.373	0.426	PASS
2	85	7.9	5.00	0.375	0.426	PASS
3	85	7.4	5.00	0.777	0.976	PASS
4	85	8.0	5.00	0.568	0.784	PASS
5	85	8.2	5.00	0.605	0.831	PASS
6	85	7.7	5.00	0.684	0.885	PASS
7	85	7.4	5.00	0.724	0.957	PASS
8	85	8.4	5.00	0.346	0.569	PASS
9	85	7.4	5.00	0.281	0.481	PASS
10	85	8.2	5.00	0.293	0.556	PASS
11	85	8.4	5.00	0.543	0.623	PASS
12	85	7.9	5.00	0.643	0.763	PASS
13	85	8.0	5.00	0.738	0.845	PASS
14	85	8.0	5.00	0.516	0.624	PASS
15	85	7.8	5.00	0.548	0.632	PASS
16	85	7.6	5.00	0.726	0.961	PASS
17	85	7.9	5.00	0.536	0.597	PASS
18	85	8.5	5.00	0.555	0.667	PASS
19	85	8.4	5.00	0.842	0.992	PASS
20	85	7.8	5.00	0.743	0.861	PASS

Overall Result: PASS

Signature:

Engineering Technician

Date: 3/30/2011

Task Number: TN-17685

Test: Sodium Chloride (NaCl) - N95

Manufacturer: Makrite Industries, Inc.

Item Tested: 9500-N95

Reference No.: CFR 84.181

STP No.: 59

Comments:

Was all equipment verified to be in calibration throughout all testing?



Yes



No

Signature:



Engineering Technician

Date: 3/30/2011