


Filtration Efficiency . . . 98.2%

Holding Capacity . . . ≤ 6.6 lbs/sf (32 kg/m²)

Air Filter Testing Laboratories, Inc. 2011

Paint Arrestance Test Reports and Safety Data Sheets:
 Regulatory Section, pp 48-61

Percent Composition: Andreae Standard Filter

PRODUCT NUMBER	PERCENT	COMPOSITION
AF213	49.55	white top liner board paper
	49.55	brown Kraft liner board paper
	0.90	glue
AF113 AF813	49.50	white top liner board paper
	49.50	brown Kraft liner board paper
	0.90	glue
	0.10	ribbon 

Pocket Depth:
 2.25 in (57 mm)

Surface Area:
 4.33 sf (0.4 m²)



Pressure Drop:

0.05 in wc (12 pa) @ 100 fpm (0.50 m/s)
 0.12 in wc (30 pa) @ 150 fpm (0.75 m/s)
 0.22 in wc (55 pa) @ 200 fpm (1.00 m/s)

Recommended Air Velocity:

49-197 fpm (0.25-1.00 m/s)

Recommended Max Pressure Drop:

0.51 in wc (128 pa); possible up to 1.03 in wc (256 pa)

Andreae Standard Filter Part Numbers and Descriptions:

PART	SIZE	FILTERS/BOX	BOXES/SKID	WEIGHT/BOX
AF113	39.25 in x 33 ft 1 x 10 m	1	60	21 lbs ± 9.5 kg ±
AF213	20 x 20 in 0.5 x 0.5 m	40	52	20 lbs ± 9.1 kg ±
AF413	20 x 25 in 0.5 x 0.6 m	36	52	24 lbs ± 10.9 kg ±
AF813	3 x 30 ft 0.9 x 9.1 m	1	60	17 lbs ± 7.7 kg ±
Custom sizes available!			weights are averaged	

Part Numbers

AF = Andreae Filter **EF = Eco Filter (limited availability)**
1st number = 1 (1x10m), 2 (20x20in), 4 (20x25in), 8 & 9 (3x30ft)
2nd number = 1 (STD, no poly back), 2 (HE, with poly back)
3rd number = 3 (white paper), 1 (brown paper)

Standard size part number: **AF813** = Andreae Filter, 3x30 ft, STD, white paper

Custom size part number: **AF813-18-48-10** (Andreae STD, 18 in x 6 ft)

Boxed in AF813 box - height 18 in - length 48 pleats - 10 filters per box

*optimum stretch is 8 pleats per linear foot or 26 pleats per linear meter

AF813 AF123
 AF923
 AF811 AF223





AIR FILTER TESTING LABORATORIES, INC.

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ASHRAE STANDARD METHOD 52.1-1992 AIRFLOW -vs- INITIAL RESISTANCE AND PAINT ARRESTOR REMOVAL EFFICIENCY; CLEAN DEVICE

DEVICE TESTED

Test Requested By **ANDREAE TEAM, INC.**
Manufacturer **ANDREAE TEAM, INC.**
Test Sample Procurement **FURNISHED BY MANUFACTURER**
Product Name **ANDREAE STANDARD FILTER (ECO STANDARD FILTER)**
Model No. **AF SERIES (EF SERIES)**
Dimensions **20 IN. H X 20 IN. W X 2 IN. D (NOMINAL)**
Product Description **MEDIA TYPE - ACCORDION PAPER**

REPORT NO.
13949

TEST NO.
1

SHEET NO.
1

TEST CONDITIONS

Test Duct Configuration	IN ACCORDANCE WITH ASHRAE STANDARD 52.1-1992	
Paint Description	HIGH SOLIDS BAKE ENAMEL (S.W. PERMACLAD 2400, WHITE)	
Paint Spray Method	CONVENTIONAL AIR-ATOMIZED SPRAY GUN	
Paint Atomization Rate	40	psi
Paint Application Rate	140	g/ min
Test Air Velocity Rate	150	ft/min (fpm)
Air Temperature	75	°F
Relative Humidity	50	%

TEST RESULTS - see attached performance curves

Initial Resistance	0.16	in. w.c.
Final Resistance	0.51	in. w.c.
Weight Gain - Paint Arrestor Filter	3005.49	g
Weight Gain - Final Filter	55.31	g
Total Weight Paint Fed	3060.80	g
Average Paint Removal Efficiency	98.2	%
Paint Holding Capacity	3005	g

DATE
06-02-2011

TEST SUPERVISOR
M.A.M.

ENGINEERING
APPROVAL

Michael A. Murphy





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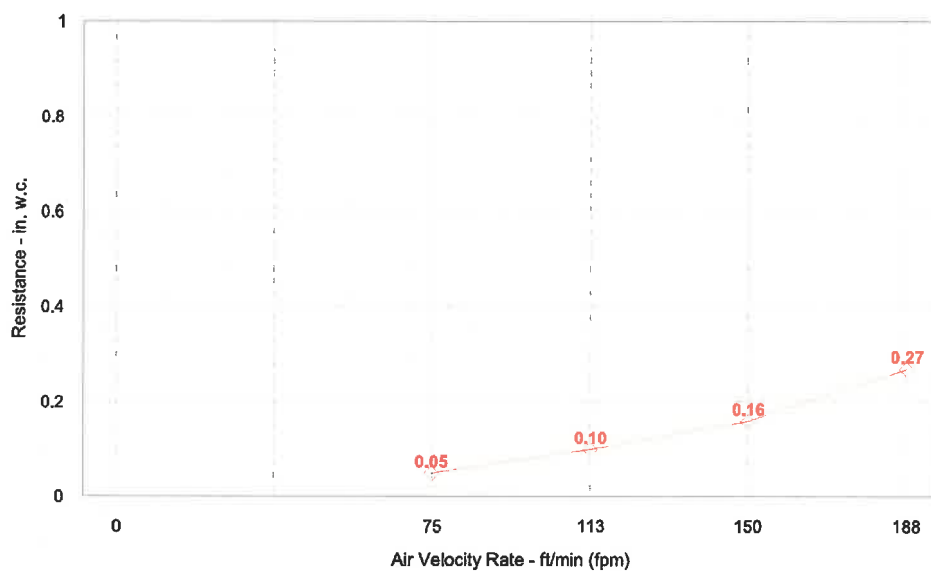
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ASHRAE STANDARD METHOD 52.1-1992 AIRFLOW -vs- INITIAL RESISTANCE AND PAINT ARRESTOR REMOVAL EFFICIENCY; CLEAN DEVICE

PERFORMANCE CURVES

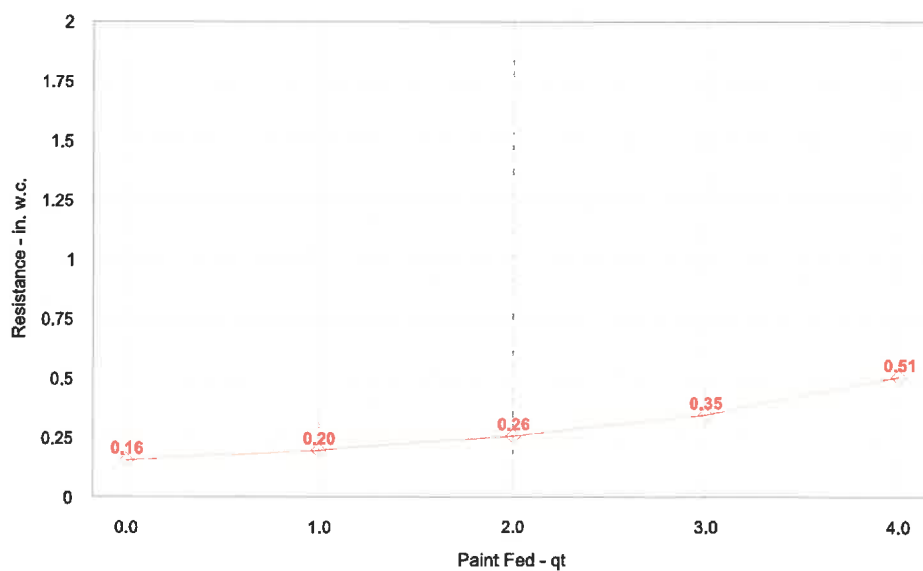
CLEAN DEVICE

Air Velocity -vs- Initial Resistance



PAINT FED -vs- RESISTANCE

Paint Increment - 1 qt.



REPORT NO.
13949

TEST NO.
1

SHEET NO.
2

DATE
06-02-2011

TEST SUPERVISOR
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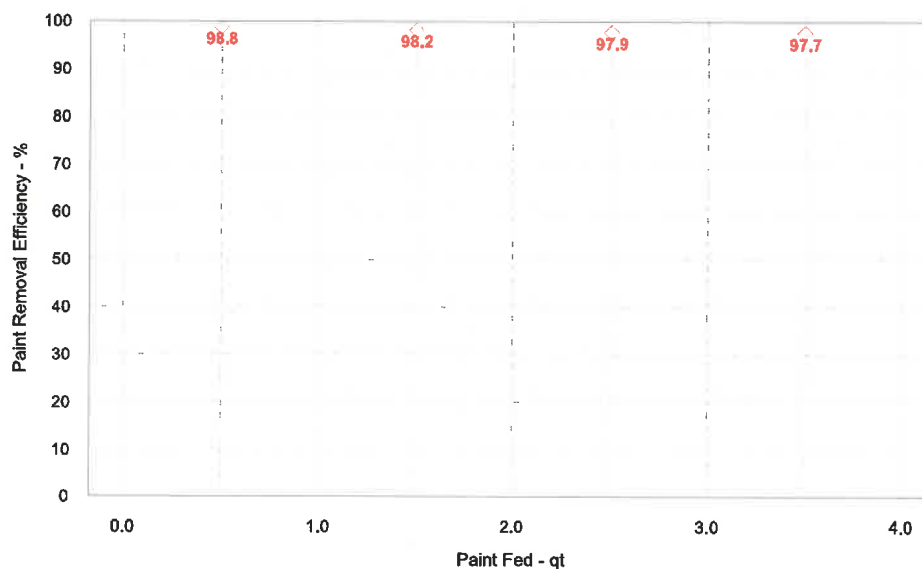
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**ASHRAE STANDARD METHOD 52.1-1992 AIRFLOW -vs- INITIAL
RESISTANCE AND PAINT ARRESTOR REMOVAL EFFICIENCY; CLEAN DEVICE**

PERFORMANCE CURVES

PAINT FED -vs- REMOVAL EFFICIENCY

Paint Increment - 1 qt.



REPORT NO.
13949

TEST NO.
1

SHEET NO.
3

DATE
06-02-2011

TEST SUPERVISOR
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SAFETY DATA SHEET

ANDREAЕ TEAM, INC.

Date of preparation: May, 2015 Revision: 5 Prepared by: Andreae Team Regulatory Specialist

Section 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Andreae Standard Filter

Synonyms: Andreae Filter, Andreae STD Filter

Product Codes: AFx1y, EFx1y

General Use: Overspray collection

Manufacturer: Andreae Team, Inc., 3550 Cypert Way, Ardmore, OK 73401 Phone: (580) 223-9334

Emergency Contact: (800) 891-9785

Section 3 – HAZARDS IDENTIFICATION

Emergency Overview: NONE

Potential Health Effects: none

Routes of Exposure: skin, eye, inhalation, ingestion.

Eyes: Direct contact with eyes may cause temporary irritation as a foreign object in the eye.

Skin: Superficial laceration (paper cuts) may occur.

Inhalation: Not an applicable route of exposure.

Ingestion: May result in obstruction and temporary irritation of the digestive tract.

Chronic Effects: not applicable

Medical Conditions Aggravated by Long-Term Exposure: none known

Target Organs: skin and eyes

Signs and Symptoms: Adverse allergic reactions to paper dust may result in, but are not limited to, redness and irritation of the eyes and skin. If such a reaction occurs, seek medical attention.

HEALTH	0
FLAMMABILITY	1
REACTIVITY	0
PERSONAL PROTECTION	0

Section 2 – COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient: recycled cellulose pulp **CAS#:** none

This material is considered to be an "Article" under 29 CFR 1910.1200 (Hazard Communication). The information in this MSDS is provided for situations where this article may be deformed creating dusts which may be potentially hazardous. The trade secret components of this product are non-hazardous based on the manufacturer's hazard evaluation.

Section 4 – FIRST AID MEASURES

Eye Contact: If irritation occurs, flush eyes with water. Remove contact lenses if worn. If abrasion or scratch occurs, seek medical attention.

Skin Contact: If irritation occurs due to dust, flush skin with water. If minor laceration occurs, wash with antibacterial soap and bandage.

Inhalation: Not a normal route of exposure.

Ingestion: If product is swallowed and obstruction occurs, seek medical attention.

Section 5 – FIRE FIGHTING MEASURES

Flammability: Product is a combustible solid.

Flash Point: 350°C, 662°F **Autoignition Temperature:** 450°C, 842°F

Note: flash point/autoignition temperature listed is the commonly accepted values for paper but may vary considerably based on the pulping process. Values specific to the pulping process used in the making of this product are not available.

Extinguishing Media: water, carbon dioxide, dry chemical, foam

Products of Combustion: May include, and are not limited to, oxides of carbon.

Sensitivity to Static Discharge: none

Unusual Fire and Explosion Hazards: Not considered an explosive hazard. Combustion products similar to this organic material produce mainly carbon dioxide, carbon monoxide and water.

Special Fire Fighting Procedures: Use self-contained breathing apparatus.



Section 6 – ACCIDENTAL RELEASE MEASURES

Material is non-hazardous.

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: none

Methods of Containment: Pick up large pieces and place in a suitable container.

Method for Clean-Up: Scoop up material and place in a disposal container.

Section 7 – HANDLING AND STORAGE

Handling Precautions: Gloves recommended for the protection of hands against superficial lacerations (paper cuts) and in case of allergic reaction. No special precautions required.

Storage Requirements: Store in a cool, dry location away from flames and sparks. Avoid product contact with water.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredients

Cellulose pulp

Exposure Limits

OSHA-PEL: not available

ACGIH-TLV: not available

Engineering Controls: No special ventilation required.

Personal Protection Equipment:

Eye Protection: Safety glasses recommended, none required.

Skin Protection: Gloves recommended, none required.

Respiratory Protection: none required

Other protective clothing: none

Hygienic Practices: Handle according to established hygiene and safety practices. Wash hands after handling recommended.

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State: solid	Specific Gravity: not available
Appearance: opaque paper	Color: white
Odor: odorless	Odor Threshold (ppm): not available
Boiling/Freezing Point: not available	pH/Viscosity: not available
Evaporation Rate: not available	Vapor Pressure/Density: not available
Solubility in water: not available	Coefficient of Water/Oil Distribution: not available
VOC content: none	

Section 10 – STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions.

Conditions of Reactivity: Avoid open flames and sparks.

Incompatible materials: none known

Hazardous decomposition or by-products: May include, and are not limited to, oxides of carbon.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Section 11 – TOXICOLOGY INFORMATION

Effects of Acute Exposure (LD50 oral and LC50): not applicable

Effects of Chronic Exposure: not hazardous

- Target Organs:** none known
- Carcinogenicity (IARC, ACGIH):** none
- Reproductive toxicity:** not hazardous
- Teratogenicity:** not hazardous
- Embryotoxicity:** not hazardous
- Mutagenicity:** not hazardous
- Skin Sensitization:** not hazardous

Toxicology of Synergistic Materials: not available

Irritancy of Product:

- Eye:** Not applicable for product in purchased form. Adverse allergic reactions may result in, but are not limited to, redness and irritation.
- Skin:** Not applicable for product in purchased form. Adverse allergic reactions may result in, but are not limited to, redness and irritation.
- Ingestion:** May result in obstruction and temporary irritation of the digestive tract.
- Inhalation:** Not applicable for product in purchased form.

Section 12 – ECOLOGICAL INFORMATION

Aquatic Toxicity: none known	
Mobility/Persistence: not available	Bioaccumulation/Accumulation: not available
Degradability/Leaching: not available	Environmental Fate: not available

Section 13 – DISPOSAL CONSIDERATIONS

Waste Disposal: Clean filters may be discarded as non-hazardous material. Loaded filters must be disposed of in the same manner as any paint-laden waste material. Coatings containing regulated chemicals or that have flammable (flash point below 140°F), toxic and/or corrosive characteristics must be disposed of as hazardous waste through a hazardous waste disposal service.

Disposal Regulatory Requirements: Refer to federal, state and local requirements for disposal (OSHA 1910.107, NFPA 33, 40CFR63 parts 260-262, state AQMD and WQMD, local Waste Management Authority).

Section 14 – TRANSPORT INFORMATION

US DOT/IMDG/IATA/CAN TDG/ADR/RID: not regulated

Hazard Class: not restricted

Section 15 – REGULATORY INFORMATION

Federal Regulations

Global Inventories: All ingredients are on DSL/NDSL and TSCA inventories.

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

WHMIS Classification: exempt **NSNR/NPRI:** no reportable substances

United States of America: MSDS prepared pursuant to the Hazard Communication Standard (29CFR1910.1200).

EPA Hazardous Waste Number and Classification (40CFR261.22): none required

Toxic Substances Control Act (TSCA): not on list

EPA SARA Title III/CERCLA: Product is not reportable under Sections 311/312 hazard categories and contains no chemicals reportable under Section 313 (40CFR372). This product does not contain chemicals that are regulated under Section 304/CERCLA (40CFR302.4).

OSHA Hazard Status: Not considered hazardous as defined by the US OSHA Hazard Communication Standard (29CFR1910.1200).

State Regulations

California Proposition 65: This product does not contain a chemical known to the state of California to cause cancer, birth defect or other reproductive harm.

Section 16 – OTHER INFORMATION

Revision Notes: Rev 5 – revise title to new format

Disclaimer: Andrae Team, Inc. provides the information contained herein in good faith and to the best of our knowledge based on data available to us. Andrae Team, Inc. makes no representations or warranties, either expressed or implied, including without limitation any warranties of merchantability or fitness for a particular purpose, with respect to the information set forth herein or the product to which the information refers. Final determination of suitability of use is the sole responsibility of the user who assumes all risks of use, handling and disposal for the product, or from the use of, or reliance upon, information contained herein. Data supplied is for use in connection with Occupational Safety and Health.



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Product Warning Statement

May, 2006

Regardless of filter media, never spray different types of coatings into the same filter. Spraying different coating types into the same filter and mishandling used filters can result in self-ignition of the filter material.

Refer to consensus fire safety standards such as NFPA 33, local fire safety codes and coating manufacturers' product use specifications regarding proper handling and disposal of used filters. Andreae Team assumes no responsibility for damages caused by improper filter use.

When disposing of filters, place in a water-filled metal container and dispose of at the close of the day's operation or until such time that the disposal of the filters can be properly administered.



For plant and personnel protection, use and dispose of filters in accordance with NFPA 33, OSHA 1910.107, EPA regulations, and city, state or area regulatory codes.



OSHA 1926.66(b)(5)(ii)

All discarded filter pads and filter rolls shall be immediately removed to a safe, well-detached location or placed in a water-filled metal container and disposed of at the close of the day's operation unless maintained completely in water.

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