LABORATORY TEST REPORT

Report # 91302
Lab Test Number: 3378-4377
Report Date: June 16, 2023

ASTM E662 Specific Optical Density, Smoke

www.testingservices.us ▪ (706)226-1400
office@testingservices.us

CLIENT:

Company:	*AHF Products*
Address:	*3840 Hempland Rd*
	Mountville, PA 17554

TEST MATERIAL:

Date Material Received:	*May 26, 2023*
Material Type:	*Sheet Vinyl*
Material Condition:	*Excellent, New*
Sample ID:	*Armstrong Natralis Vinyl Sheet (Homogeneous)*

TESTING METHODS REQUESTED:

Testing Services Inc. was instructed by the client to test for the following…			
Standard:	*ASTM E662*	*Test Method:*	*Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials*

SAMPLING PLAN:

Sampling Date:	*5/26/2023*

- *Specimen sampling is performed in the sampling department at TSI.*
- *The sampling size of specimens is determined by the test method requirements.*
- *In the event a specific sampling size is not called for, a determination will be made based on previous testing experience, and approved for use by an authorized manager.*
- *All samples are subjected to the outside environmental conditions of temperature and relative humidly.*
- *Sample requiring pre-determined exposure to specified environmental conditions based on a specific test method, take place in the departments in which they are tested*

DEVIATION FROM TEST METHOD:

State reason for any Deviation from, Additions to, or Exclusions From Test Method.
None

TEST SCOPE: *This test method determines the specific optical density of smoke generated by solid materials and assemblies in a vertical position. Measurement is made of the attenuation of a light beam by smoke accumulating within a closed chamber due to non-flaming or flaming combustion.*

TEST SUMMARY:

ASTM E662-21a	*FLAMING MODE*				*NON-FLAMING MODE*			
Specimen #	*1*	*2*	*3*	*AVG*	*1*	*2*	*3*	*AVG*
Specific Optical Density (DS) @ 1.5 Min	*76*	*128*	*130*	*111*	*36*	*34*	*31*	*34*
Specific Optical Density (DS) @ 4.0 Min	*175*	*402*	*293*	*290*	*219*	*270*	*226*	*238*
Maximum Specific Optical Density (DM)	*223*	*450*	*328*	*334*	*477*	*435*	*465*	*459*
Clear Beam (DC)	*68*	*109*	*90*	*89*	*50*	*108*	*111*	*90*
Corrected (DMC)	*155*	*341*	*238*	*245*	*427*	*327*	*354*	*369*

Requirements: ≤ 450 DMC *Burner Fuel: Propane* *Irradiance: 2.5 W/cm²*
Radiometer Output: 8.1 mv *Furnace Voltage: 117v* *Pressure: Positive Under 3" Water*

Uncertainty:
We undertake all assignments for our clients on a best effort basis. Our findings and judgments are based on the information using the latest test methods available.
TSI can only ensure the test results for the specific items tested.

Unless otherwise noted in the deviations sections of this report, all tests are performed in compliance with stated test method.

Test Report Approval:

Digitally signed by Nathan Lomax
DN: cn=Nathan Lomax, o=Testing Services (TSI) LLC, ou, email=office@testingservices-usa.com, c=US
Date: 2023.06.16 15:17:40 -04'00'

Erle Miles, III, Lab Director, Testing Services (TSI) LLC

TSi Accreditation: Our laboratory is accredited by the US Dept. of Commerce, National Institute of Standards and Technology: ISO/IEC 17025:2005. Our code # is: NVLAP 100108-0.
TSi is an Organizational Member of ASTM (American Society for Testing and Materials).

NVLAP TESTING **100108-0**

ASTM Organizational Member

Testing Services (TSI) LLC
817 Showalter Avenue
PO Box 1343
Dalton, GA 30721