

Professional Testing Laboratory Inc.

TEST REPORT

 DATE: 07-31-2023
 Page 1 of 1
 TEST NUMBER: 0299164

 CLIENT
 Egetaepper a/s

	ASTM E662 Smoke Density (Non-Flaming) Standard Test Method for	
	Specific Optical Density of Smoke Generated by Solid Materials	



	DESCRIPTION OF TEST SAMPLE	
IDENTIFICATION	Highline Wool 1400 ect350	
CONSTRUCTION	Cut Pile	

GENERAL PRINCIPLE

This procedure is designed to measure the specific optical density of smoke generated by the test specimen within a closed chamber. Each specimen is exposed to an electrically heated radiant-energy source positioned to provide a constant irradiance level of 2.5 watts/square cm on the specimen surface. Measurements are recorded through a photometric system employing a vertical beam of light and a photo detector positioned to detect the attenuation of light transmittance caused by smoke accumulation within the chamber. The light transmittance measurements are used to calculate specific optical density, a quantitative value which can be factored to estimate the smoke potential of materials. Two burning conditions can be simulated by the test apparatus. The radiant heating in the absence of ignition is referred to as the Non-Flaming Mode. A flaming combustion in the presence of supporting radiation constitutes the Flaming Mode.

CONDITIONS			
PREDRYING OF TEST SAMPLE CONDITIONING OF TEST SAMPLE TESTING CONDITION 24 Hours at 140° F 24 Hours at 70° F and 50% Relative Humidity As Received			
FURNACE VOLTAGE CHAMBER TEMPERATURE TEST MODE	118 V 95° F Non-Flaming	IRRADIANCE CHAMBER PRESSURE	2.5 watts/sq cm 3" H ₂ O

AVERAGE MAXIMUM DENSITY CORRECTED (Dmc) AVERAGE SPECIFIC OPTICAL DENSITY AT 4.0 MINUTES		180 58	
Maximum Density (Dm)	186.0	191.0	177.0
Time to Dm (minutes)	18.0	18.5	17.5
Clear Beam (Dc)	5.0	4.0	5.0
Corr. Max Density (Dmc)	181.0	187.0	172.0
Density at 1.5 minutes	21.0	20.0	18.0
Density at 4.0 minutes	54.0	61.0	59.0
Time to 90% Dm (minutes)	13.5	14.0	14.0
Specimen Weight (grams)	18.4	18.4	18.3

APPROVED BY:

QAJVK

This facility is accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under Lab Code 100297. This accreditation does not constitute an endorsement, certification, or approval by NIST or any agency of the United States Government for the producttested. This report is provided for the exclusive use of the client to whom it is addressed. It may be used in its entirety to gein product acceptance from duly constituted authorities. This report applies only to those samples testedand is not necessarily indicative of apparently identical or similar products. This report, or the name of Professional Testing Laboratory, Inc. shall not be used under any circumstance in advertising to the general public.



714 Glenwood Place

Dalton, GA 30721

Hary asbury

706-226-3283

Fax: 706-226-6787

protest@optllink.us



Professional Testing Laboratory Inc.

TEST REPORT

DATE: 07-31-2023 Page 1 of 1 TEST NUMBER: 0299164

CLIENT Egetaepper a/s

TEST METHOD CONDUCTED

ASTM E662 Smoke Density (Flaming) Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials



	DESCRIPTION OF TEST SAMPLE	
IDENTIFICATION	Highline Wool 1400 ect350	
CONSTRUCTION	Cut Pile	

GENERAL PRINCIPLE

This procedure is designed to measure the specific optical density of smoke generated by the test specimen within a closed chamber. Each specimen is exposed to an electrically heated radiant-energy source positioned to provide a constant irradiance level of 2.5 watts/square cm on the specimen surface. Measurements are recorded through a photometric system employing a vertical beam of light and a photo detector positioned to detect the attenuation of light transmittance caused by smoke accumulation within the chamber. The light transmittance measurements are used to calculate specific optical density, a quantitative value which can be factored to estimate the smoke potential of materials. Two burning conditions can be simulated by the test apparatus. The radiant heating in the absence of ignition is referred to as the Non-Flaming Mode. A flaming combustion in the presence of supporting radiation constitutes the Flaming Mode.

CONDITIONS 24 Hours at 140° F PREDRYING OF TEST SAMPLE **CONDITIONING OF TEST SAMPLE** 24 Hours at 70° F and 50% Relative Humidity **TESTING CONDITION** As Received IRRADIANCE 2.5 watts/sa.cm **FURNACE VOLTAGE** 118 V **CHAMBER PRESSURE** 3" H₂O 95° F **CHAMBER TEMPERATURE** TEST MODE Flaming

AVERAGE MAXIMUM DENSITY CORRECTED (Dmc) FLAMING		400	
AVERAGE SPECIFIC OPTICAL DENSITY AT 4.0 MINUTES			215
	Specimen 1	Specimen 2	Specimen 3
Maximum Density (Dm)	427.0	409.0	421.0
Time to Dm (minutes)	8.5	8.0	8.0
Clear Beam (Dc)	19.0	19.0	20.0
Corr. Max Density (Dmc)	408.0	390.0	401.0
Density at 1.5 minutes	1.0	2.0	1.0
Density at 4.0 minutes	219.0	206.0	220.0
Time to 90% Dm (minutes)	5.5	6.0	6.0
Specimen Weight (grams)	18.4	18.3	18.5

APPROVED BY:

QAIVIN

This facility is accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under Lab Code 100297. This accreditation does not constitute an endorsement, certification, or approval by NIST or any agency of the United States Government for the producttested. This report is provided for the exclusive use of the client to whom it is addressed It may be used in its entirety to gain product acceptance from duly constituted authorities. This report applies only to those samples testedand is not necessarily indicative of apparently identical or similar products. This report, or the name of Professional Testing Laboratory, Inc. shall not be used under any circumstance in advertising to the general public.



714 Glenwood Place

Dalton, GA 30721

Dary asbury

706-226-3283

Fax: 706-226-6787

protest@optilink.us