

TEST REPORT

DATE: 01-11-2024

Page 1 of 1

TEST NUMBER: 0303996

CLIENT Egetaepper a/s

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

	DESCRIPTION OF TEST SAMPLE
IDENTIFICATION	Grace CF-Black
CONSTRUCTION	Cut Pile
BACKING	Attached Backing

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

AVERAGE MAXIMUM DENSITY CORRECT	CTED (Dmc)	NON-FLAMING	119
AVERAGE SPECIFIC OPTICAL DENSITY A	3		
	Specimen 1	Specimen 2	Specimen 3
Maximum Density (Dm)	91.0	140.0	129.0
Time to Dm (minutes)	20.0	20.0	20.0
Clear Beam (Dc)	0.0	1.0	1.0
Corr. Max Density (Dmc)	91.0	139.0	128.0
Density at 1.5 minutes	0.0	0.0	0.0
Density at 4.0 minutes	2.0	5.0	3.0
Time to 90% Dm (minutes)	14.5	15.0	14.0
Specimen Weight (grams)	17.3	16.7	17.3

This facility is accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under This facility is accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of accreditation of no not constitute an endorsement, certification, or approval PIST or any agency of the United States Government for the product tested. 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 tested and is not necessarily indicative of apparently identical or similar products. This report, or the name of Professional Testing Laboratory, LLC, shall not be used under any circumstance in advertising to the general public.



Fax: 706-226-6787

714 Glenwood Place

Dalton, GA 30721

706-226-3283

protest@optilink.us



TEST REPORT

CLIENT Egetaepper a/s	per a/s
-----------------------	---------

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

DESCRIPTION OF TEST SAMPLE			
	Grace CF-Black		
CONSTRUCTION	Cut Pile		
BACKING	Attached Backing		

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

AVERAGE MAXIMUM DENSITY CORRECTED (Dmc) FLAMING AVERAGE SPECIFIC OPTICAL DENSITY AT 4.0 MINUTES			174 166
Maximum Density (Dm)	224.0	160.0	214.0
Time to Dm (minutes)	8.0	9.0	8.5
Clear Beam (Dc)	29.0	20.0	26.0
Corr. Max Density (Dmc)	195.0	140.0	188.0
Density at 1.5 minutes	0.0	0.0	0.0
Density at 4.0 minutes	191.0	133.0	174.0
Time to 90% Dm (minutes)	6.5	7.5	7.0
Specimen Weight (grams)	17.7	17.6	18.0

APPROVED BY:

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 product tested. 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 sample tested and is not necessarily indicative of apparently identical or similar products. This report, or the name of Professional Testing Laboratory, LLC, shall not be used under any circumstance in advertising to the general public.



6-3283 Fax: 706-226-6787

protest@optilink.us