Professional Testing Laboratory Inc.

TEST REPORT

DATE: 08-24-2017 **TEST NUMBER**: 0240040

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 also referenced as NFPA 258

	DESCRIPTION OF TEST SAMPLE
IDENTIFICATION	Highline 80/20 1400 ECT350
CONSTRUCTION	Cut Pile
BACKING	Attached Cushion
REFERENCE	Modular Collection

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 Flaming	**IRRADIANCE** **CHAMBER PRESSURE**	2.5 watts/sq cm 3" H_2O

AVERAGE MAXIMUM DENSITY CORRECTED (Dmc) FLAMING	124
AVERAGE SPECIFIC OPTICAL DENSITY AT 4.0 MINUTES	37

	Specimen 1	**Specimen 2**	**Specimen 3**
Maximum Density (Dm)	134.0	146.0	125.0
Time to Dm (minutes)	13.5	15.0	13.0
Clear Beam (Dc)	10.0	14.0	8.0
Corr. Max Density (Dmc)	124.0	132.0	117.0
Density at 1.5 minutes	8.0	13.0	7.0
Density at 4.0 minutes	36.0	45.0	30.0
Time to 90% Dm (minutes)	10.5	10.5	9.5
Specimen Weight (grams)	18.7	18.8	18.7

**** This sample PASSES the requirements of 450 or less.***

APPROVED BY: Gary A. Curry

NVLAP

714 Glenwood Place Dalton, GA 30721 Phone 706-226-3283 Fax 706-226-6787 email protest@optilink.us

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FURNACE VOLTAGE **CHAMBER TEMPERATURE** **TEST MODE**	118 V 95° F Non-Flaming	**IRRADIANCE** **CHAMBER PRESSURE**	2.5 watts/sq cm 3" H_2O

AVERAGE MAXIMUM DENSITY CORRECTED (Dmc)		**NON-FLAMING**	314
AVERAGE SPECIFIC OPTICAL DENSITY AT 4.0 MINUTES			204
	Specimen 1	**Specimen 2**	**Specimen 3**
Maximum Density (Dm)	335.0	349.0	354.0
Time to Dm (minutes)	11.5	12.0	12.0
Clear Beam (Dc)	28.0	35.0	32.0
Corr. Max Density (Dmc)	307.0	314.0	322.0
Density at 1.5 minutes	66.0	75.0	78.0
Density at 4.0 minutes	191.0	207.0	215.0
Time to 90% Dm (minutes)	9.5	10.5	10.0
Specimen Weight (grams)	18.4	19.0	18.8

**** This sample PASSES the requirements of 450 or less.***

APPROVED BY: Gary Ashburn

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