

Professional Testing Laboratory Inc.

## **TEST REPORT**

| DATE: 08-24-2020      | Page 1 of 1   | TEST NUMBER: 0268865   |
|-----------------------|---|--|
| CLIENT                | Egetaepper a/s  |  |
| TEST METHOD CONDUCTED | ASTM E662 Smoke Density (Non-F<br>Specific Optical Density of Smoke<br>referenced as NFPA 258 | flaming) Standard Test Method for<br>Generated by Solid Materials also |
|                       |   |  |

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|---|

|                      | DESCRIPTION OF TEST SAMPLE |
|----------------------|----------------------------|
| IDENTIFICATION       | Highline 750 ab            |
| CONSTRUCTION         | Cut Pile                   |
| BACKING              | Attached Cushion           |
| OFILED 11 DOM: 0101- |                            |

**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 | IDITIONING OF TEST SAMPLE 24 Hours at 70° F and 50% Relative Humidity |                                |  |
| FURNACE VOLTAGE CHAMBER TEMPERATURE TEST MODE                          | 118 V<br>95° F<br>Non-Flaming   | IRRADIANCE<br>CHAMBER PRESSURE | 2.5 watts/sq cm<br>3" H <sub>2</sub> O |

| AVERAGE MAXIMUM DENSITY CORRECTE                |            | NON-FLAMING | 180        |
|---|------------|-------------|------------|
| AVERAGE SPECIFIC OPTICAL DENSITY AT 4.0 MINUTES |            |             | 18         |
|   | Specimen 1 | Specimen 2  | Specimen 3 |
| Maximum Density (Dm)                            | 184.0      | 174.0       | 194.0      |
| Time to Dm (minutes)                            | 14.0       | 13.5        | 14.0       |
| Clear Beam (Dc)                                 | 4.0        | 2.0         | 5.0        |
| Corr. Max Density (Dmc)                         | 180.0      | 172.0       | 189.0      |
| Density at 1.5 minutes                          | 2.0        | 1.0         | 3.0        |
| Density at 4.0 minutes                          | 17.0       | 15.0        | 21.0       |
| Time to 90% Dm (minutes)                        | 12.0       | 11.5        | 12.5       |
| Specimen Weight (grams)                         | 14.2       | 13.8        | 14.0       |

<sup>\*</sup> This sample PASSES the requirements of 450 or less.

APPROVED BY:

Day asbury

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as NFPA 258

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|  | CON  | IDITIONS                       | KIRCH KENDUS HAND DANS                 |
|--|--|--------------------------------|--|
| PREDRYING OF TEST SAMPLE CONDITIONING OF TEST SAMPLE TESTING CONDITION | 24 Hours at 140° F<br>24 Hours at 70° F and 50% Relative Humidity<br>As Received |                                |  |
| FURNACE VOLTAGE CHAMBER TEMPERATURE TEST MODE                          | 118 V<br>95° F<br>Flaming  | IRRADIANCE<br>CHAMBER PRESSURE | 2.5 watts/sq cm<br>3" H <sub>2</sub> O |

| AVERAGE MAXIMUM DENSITY CORRECTE    | D (Dmc)     | FLAMING    | 120        |
|-------------------------------------|-------------|------------|------------|
| AVERAGE SPECIFIC OPTICAL DENSITY AT | 4.0 MINUTES |            | 147        |
|                                     | Specimen 1  | Specimen 2 | Specimen 3 |
| Maximum Density (Dm)                | 146.0       | 149.0      | 154.0      |
| Time to Dm (minutes)                | 3.5         | 4.0        | 4.5        |
| Clear Beam (Dc)                     | 25.0        | 30.0       | 33.0       |
| Corr. Max Density (Dmc)             | 121.0       | 119.0      | 121.0      |
| Density at 1.5 minutes              | 23.0        | 26.0       | 27.0       |
| Density at 4.0 minutes              | 141.0       | 147.0      | 154.0      |
| Time to 90% Dm (minutes)            | 2.0         | 2.0        | 2.0        |
| Specimen Weight (grams)             | 14.6        | 14.1       | 14.5       |

<sup>\*</sup> This sample PASSES the requirements of 450 or less.

APPROVED BY:

Hay asbury



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