



**TEST REPORT**

**REPORT NUMBER: 102628407MID-002**  
ORIGINAL ISSUE DATE: June 27, 2016  
REVISED DATE: NA  
LIMS #116301

**EVALUATION CENTER**  
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**RENDERED TO**  
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PRODUCT EVALUATED: PC/ ASA GP2 7858  
EVALUATION PROPERTY: ASTM D635

**Report of Testing PC/ ASA GP2 7858 for compliance with the applicable requirements of the following criteria: ASTM D635-14 Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position**

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## 2 Introduction

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Intertek has conducted testing for Polymer Resources, LTD on PC/ ASA GP2 7858 to compare the relative linear rate of burning or extent and time for burning, or both, of plastics in the form of bars, molded or cut from sheets, plates, or panels, tested in the horizontal position, using a small scale laboratory screening procedure. Testing was conducted in accordance with ASTM D635-14 Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position. This evaluation began June 15, 2016 and was completed June 15, 2016.

## 3 Test Samples

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### 3.1. SAMPLE SELECTION

Samples were submitted to Intertek directly from the client. Samples were not independently selected for testing. Samples were received at the Evaluation Center on June 2, 2016 in good condition.

### 3.2. SAMPLE AND ASSEMBLY DESCRIPTION

Sample Name: PC/ ASA GP2 7858

Sample Description: Polycarbonate (PC) and a Styrene Acrylonitrile Acrylic (ASA) Terpolymer

Specimens of the material were cut to the dimensions of 13 mm +/-0.5 mm by 125 mm +/- 5 mm by 1.05mm by the client.

They were conditioned in accordance with Method D 618 at  $23 \pm 2^{\circ}\text{C}$  and  $50 \pm 5\%$  relative humidity for at least 48 hours, removed and tested within one hour, in  $15\text{-}35^{\circ}\text{C}$  and  $45\text{-}75\%$  relative humidity.

## 4 Testing and Evaluation Methods

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### 4.1. TEST STANDARD

The test was completed in the test chamber with each test sample clamped to the farthest end from the 25 mm line. The test sample was inclined  $45 \pm 2^{\circ}$  at the transverse axis and the longitudinal axis was horizontal. The wire gauze was clamped with a distance of  $10 \pm 1$  mm between the lowest edge and the gauze and the free end even with the edge of the gauze.

The burner tube was placed remotely and ignited and adjusted until a 20 mm yellow tipped blue flame was visible, then adjusted until the yellow tip disappeared and the flame was 20mm high. The flame was placed angled at  $45^{\circ}$  for 30 seconds to the horizontal of the sample. The flame was withdrawn after 30 seconds or as soon as it reached the 25 mm mark, if less than 30 seconds. The timer was started when the flame front reached the 25 mm reference mark. This procedure was repeated three times on different test samples reaching the 100mm reference mark or until ten different samples were tested.

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#### 4.2. DEVIATIONS FROM THE STANDARD METHOD

There were no deviations from the standard.

#### 4.3. TEST CRITERIA

The Specimens shall be classified as HB (horizontal burning) if:

- There was no visible signs of combustion as the ignition source was removed
- The flame front does not pass the 25mm reference mark
- The flame front passes the 25 mm reference mark but does not reach the 100 mm reference mark
- The flame front reaches the 100 mm reference mark and the linear burning rate does not exceed 40 mm/min for the specimens that have a thickness between 3 and 13 mm or 75 mm/min for specimens having a thickness less than 3 mm.
- Another set of 10 specimens will be run if one of the specimens does not comply with the above criteria. All of the specimens for the second set shall comply with the criteria indicated above
- If the linear burning rate does not exceed 40 mm/min tested in the 3.0mm+/-2 mm thickness, the HB category designation shall be extended to a 1.5 mm minimum thickness.

## 5 Testing and Evaluation Results

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### 5.1. RESULTS AND OBSERVATIONS

**Equipment:** Stopwatch #1428

Specimen	Did flame	Did flame
	Reach	Reach
	25mm (Y/N)	100mm (Y/N)
1	N	N
2	N	N
3	N	N

### 5.2. EXAMINATION OF RESULTS

Samples self-extinguished before the flame made it to the 25mm mark.

PC/ ASA GP2 7858 has achieved a rating of HB by ASTM D635-14 criteria.

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## 6 Conclusion

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Intertek has conducted testing for Polymer Resources on PC/ ASA GP2 7858 to compare the relative linear rate of burning or extent and time for burning, or both, of plastics in the form of bars, molded or cut from sheets, plates, or panels, tested in the horizontal position, using a small scale laboratory screening procedure. Testing was conducted in accordance with ASTM D635-14 Standard Test Method for Rate of Burning or Extent and Time of Burning of Plastics in a Horizontal Position.

**PC/ ASA GP2 7858 has achieved a rating of HB by ASTM D635-14 criteria.**

The conclusions of this test report may not be used as part of the requirements for Intertek product certification. Authority to Mark must be issued for a product to become certified.

### INTERTEK



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## REVISION SUMMARY

DATE	SUMMARY
June 27, 2016	Date of original report

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