

Flammability and Building Code Requirements

Signs made from **NovAcryl PT series** photopolymer on PETG thermoplastic (Eastman Spectar14471), with or without UV cap layer will meet all flammability requirements specified by BOCA (1), SBCCI (2), and ICBO (3) for light transmitting plastics such as those used for interior or exterior sign faces, skylights, glazing materials and vending machine faces.

- (1) Building Officials and Code Administration International, Inc.
- (2) Southern Building Code Congress International, Inc.
- (3) International Congress of Building Officials

Surface Burning Characteristics:

Flame spread and smoke density (ASTM E 84 and UL 723)

Signs made from NovAcryl PT Series photopolymer on PETG thermoplastic (Eastman Spectar 14471), with or without UV cap layer are UL classified as having a flame spread index of less than 75 and the smoke density developed is less than 120. This data applies to a sheet thickness of .118" and above. The results indicate that signs made from NovAcryl will meet the requirements for interior finish flame spread Class II.

It should be noted that this data was collected while the sheet samples remained in the original test fixture position. These results do not include the material that ignited on the furnace floor.

Note: A Class II material can be used in place of a Class I material when installed with an approved automatic fire suppression system. If the application in question requires that the sheet be both impact resistant and fire-rated, the product must be tested under ASTM E 119 (Fire Tests of Building Construction and Materials). Testing of the recommended specialty sprinkler system in combination with the sign material will ensure the protection and integrity of the plastic construction materials under fire and high heat conditions.

Rate of Burning (ASTM D 635):

Signs made from NovAcryl PT Series photopolymer on PETG thermoplastic (Eastman Spectar 14471), with or without UV cap layer when tested according to ASTM D 635 will burn less than one inch. It therefore meets the requirements for classification CC1 at a nominal thickness of .060".

UL Vertical Burning Classification:

Signs made from NovAcryl PT Series photopolymer on PETG thermoplastic (Eastman Spectar 14471), with or without UV cap layer is classified by UL as 94V-2 in a thickness of .118" or greater. A sheet thickness less than .118" is classified as 94HB.

Self Ignition Temperature (ASTM D 1929)

According to tests by an independent laboratory, signs made from NovAcryl PT Series photopolymer on PETG thermoplastic (Eastman Spectar 14471), with or without UV cap layer have a self ignition temperature of 800 degrees Fahrenheit (425 C). This test result exceeds the BOCA requirement of 650 degrees Fahrenheit (345 C) when tested by ASTM D 1929.