

uPVC Technical Information

Fire Testing - Extruded uPVC



Purpose of Test

To determine the flammability of a plastics material when it is tested in accordance with the test procedure specified in Section 8 - “50W (20mm) Vertical Burning Test for Classifying Materials 94V-0, 94V-1 or 95V-2” of UL94 - ‘Test fo Flammability of Plastics Materials for Parts in Devices and Appliances’.

Conditions of Specimens

Five specimens were conditioned for at least 48 hours at a temperature of $23 \pm 2^{\circ}\text{C}$ and a relative humidity of $50 \pm 5\%$ prior to testing.

Five specimens were conditioned in a circulating air oven for 168 hours at 70°C and were then cooled in a desiccator, over anhydrous calcium chloride, for at least four hours at room temperature prior to testing.

Test Results

Specimens conditioned at a temperature of $23 \pm 2^{\circ}\text{C}$ and a relative humidity of $50 \pm 5\%$

Specimen No.	A	B	C	D	E
1	Nil	Nil	Nil	No	No
2	Nil	Nil	Nil	No	No
3	Nil	2	Nil	No	No
4	Nil	2	Nil	No	No
5	Nil	1	Nil	No	No

Specimens conditioned at a temperature of $70 \pm 1^{\circ}\text{C}$ for 168 hours

Specimen No.	A	B	C	D	E
1	Nil	Nil	Nil	No	No
2	Nil	1	Nil	No	No
3	Nil	2	Nil	No	No
4	Nil	1	Nil	No	No
5	Nil	2	Nil	No	No

Conculsion

When the test results are assessed using the test criteria specified in the Standard, the material, when tested at a nominal thickness of 1.6mm, is classified as “94V-0”.