

## Flammability Rating for SOLYX and SimGlas Frosted PVC and Polyester privacy films with adhesive:

**PRODUCT:** SOLYX Window Films / SimGlas Window Films

When applied to surfaces- glass or plastic sheet:

Horizontal Burn (Flame Spread) ASTM D-635 inch Less than 1.0

UL 94 Rating UL 94 UL Classification V-O

Class A 0 -25 Flame Spread Index 0 -450 Smoke Developed Index

SOLYX Films are suitable for installation onto fire rated glass and will not affect the rating of fire rated glass.

ASTM D635

### Significance and Use

Tests made on a material under conditions herein prescribed are of value in comparing the rate of burning or extent and time of burning characteristics, or both, of different materials, in controlling manufacturing processes, or as a measure of deterioration or change in these burning characteristics prior to or during use. Correlation with flammability under actual use conditions is not implied.

The rate of burning and other burning phenomena will be affected by such factors as density, pigments, any anisotropy of the material and the thickness of the specimen. Test data shall be compared only for specimens of similar thickness, whether comparisons are being made with the same or different materials. The rate of burning and other burning phenomena will vary with thickness.

It is feasible that sheet materials that have been stretched during processing will relax during burning and give erratic results unless they are first heated above their deflection temperature, in accordance with Test Method D648, for a time sufficient to permit complete relaxation.

Burning tests require that certain variables be arbitrarily fixed, for example, specimen size, energy source and application time, and end points. Materials will be found that are unusually sensitive to one or more of the conditions chosen for this method leading to highly variable results. Additional burning characterization by other methods is highly desirable in such cases (see Note 2).

In this procedure, the specimens are subjected to specific laboratory test conditions. If different test conditions are substituted or the end-use conditions are changed, it will not always be possible by or from this test to predict changes in the fire-test-response characteristics measured. Therefore, the results are valid only for the fire-test-exposure conditions described in this procedure.

### 1. Scope

1.1 This fire-test-response test method covers a small-scale laboratory screening procedure for comparing the relative linear rate of burning or extent and time of burning, or both, of plastics in the form of bars, molded or cut from sheets, plates, or panels, and tested in the horizontal position.

Note 1—This test method, and test method A of IEC 60695-11-10 are technically equivalent.

Note 2—For additional information on materials which do not burn to the first reference mark by this test, see Test Method D3801.

1.2 This test method was developed for polymeric materials used for parts in devices and appliances. The results are intended to serve as a preliminary indication of their acceptability with respect to flammability for a particular application. The final acceptance of the material is dependent upon its use in complete equipment that conforms with the standard applicable to such equipment.

1.3 The classification system described in Appendix X1 is intended for quality assurance and the preselection of component materials for products.

1.4 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.5 This standard is used to measure and describe the response of materials, products, or assemblies to heat and flame under controlled conditions, but does not by itself incorporate all factors required for fire hazards or fire risk assessment of materials, products, or assemblies under actual fire conditions.

1.6 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use. For specific hazards statements, see 9.2.

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only. The 1985 American Society for Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) Handbook of Fundamentals.

The American Society for Testing and Materials (ASTM) publication:

ASTM E-308 Standard Recommended Practice for Spectrophotometry and Description of Color in CIE 1931 System

ASTM E-903 Standard Methods of Test for Solar Absorbance, Reflectance and Transmittance of Materials Using Integrating Spheres

ASTM D-1044 Standard Method of Test for Resistance of Transparent Plastics to Surface Abrasion (Taber Abrader Test)

ASTM G-90 Standard Practice for Performing Accelerated Outdoor Weatherizing for Non-metallic Materials Using Concentrated Natural Sunlight

ASTM E-84 Standard Method of Test for Surface Burning Characteristics of Building Materials