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# Flammability

Sileather® silicone fabrics are inherently flame resistant thanks to the protective nature of silicone. Our silicone fabrics, since the start of our design to abandon the use of adding flame retardants into our fabric, has meet international flammability standard including:

## **ASTM E84**

The ASTM E-84 is the standard test method for assessing the surface burning characteristics of building products to explore how the material might contribute to flame spread in the event of a fire. The test reports the Flame Spread index and Smoke Developed index of the tested products.

## **BS 5852 #0,1,5(crib)**

BS 5852 #0,1,5 (crib) assesses the ignitability of material combinations (like covers and filling) when subjected to an ignition source like a smoldering cigarette or match flame equivalent.

## **CA Technical Bulletin 117- 2013**

This standard measures flammability using both open flame and lighted cigarettes as the ignition sources. All upholstery components are to be tested. This test is mandatory in the State of California. It is used nationwide as a minimum voluntary standard and is also cited as a minimum standard by the General Services Administration (GSA).

## **EN 1021 Part1 and 2**

This standard is valid throughout the EU and examines a fabric's reaction to a burning cigarette. It replaces a number of national tests, including DIN 54342: 1/2 in Germany and BS 5852: 1990 in the UK. Ignition source 0 - This ignition source is used as a "smolder" test rather than a "flame" test as no flame is generated by the ignition source itself. The cigarette is left to smolder along its length, and no smoldering or flaming of the fabric should be observed after 60 minutes.

## **EN45545-2**

EN45545-2 is a European standard for the fire safety of railway vehicles. It specifies the requirements and testing methods for materials and components used in railway vehicles to reduce the risk of fire. The standard is divided into several hazard levels, with HL3 being the highest level.

### **FMVSS 302**

This is a horizontal rate of burning test procedure. It is mandatory for all automotive interiors throughout the United States and Canada.

### **IMO FTP 2010 Code Part 8**

This test procedure prescribes methods for assessing the ignitability of material combinations, e.g. covers and filling used in upholstered seating, when subjected to either a smoldering cigarette or a lighted match as might be applied accidentally in the use of upholstered seats. It does not cover ignition caused by deliberate acts of vandalism. Annex I, 3.1 measures flammability using a lighted cigarette and Annex I, 3.2 measures flammability with a butane flame as the ignition source.

### **UFAC**

The UFAC procedures assess the cigarette ignition properties of the individual upholstery components. During the test, the individual component is tested in conjunction with a standard component. For example, during the fabric test, the candidate fabric is used to cover a standard filling material. During the filling material test, the candidate filling material is covered with a standard fabric.

### **GB 8410**

This Standard specifies the technical requirements and test methods for the horizontal flammability of automotive interior materials.