

CEL-SPAN®



FR 680

Cel-Span® FR 680

A highly loaded flame retardant for polyethylene injection molding and extrusion applications.

Cel-Span® FR 680 is a highly loaded 80% concentrate flame retardant tailored for a variety of applications including injection molding and sheet extrusion. Cel-Span® FR 680 was designed to be a cost effective retardant made for polyethylene and polypropylene requirements including the Boston Fire Department Test and the NFPA – 701 small scale test. The use of Cel-Span® FR 680 will result in excellent flame retardancy to pass several flammability requirements. Flame testing has shown that recommended levels between 6% - 30% are intended as guidelines, but optimization is necessary for each application because of the differences between equipment, resin systems, additives and flame retardancy requirements. This product is non-blooming and can be used in colored films. Cel-Span® is ROHS compliant but does not carry a U.S.P/ FDA approval for food contact.

Applications: Injection Molding – Sheet Extrusion

Melt Flow: 1.3 (grams/10 min.), at 190°F - ASTM D1388 Condition E w/4560wt.

Blend Density: 2.30-2.38 g/cc), (Test Method: ASTM D792)

LOI: 48-53% (Test Method: ASTM D2863)

Color/Form: Natural Free - Flowing Pellets

Types of Resins: Polyethylene and Polypropylene

Amount Required: 6% -30% (depending on thickness and flame requirements)

Features and Benefits:

- Low concentration requirements
- Distributes easily
- Does not conflict with other additives

NFPA 701

Mils	% CS 680	Wt. Loss	Cone Length	Flame Drip	Flame Time	Pass/Fail
4	6	0.49%	5.8"	0 sec	0 sec	Pass
22	10	1.54%	1.2"	0 sec	0 sec	Pass

Cel-Span® FR 680 can be processed at temperatures typical of polyethylene and polypropylene using standard equipment. Cel-Span® FR 680 is packaged in 55 lb. plastic bags and 1,500 lb. gaylord boxes. We recommend this product be kept closed and stored in the original container, away from light, heat, and highly humid environments. Cel-Span® FR 680 does not carry a U.S.P. / FDA approval for food contact.

Disclaimer - This data contains general Information and describes typical properties only. Only persons qualified to determine for themselves the suitability of our products for particular purposes should evaluate its potential uses. No guarantee is made or liability assumed, the application of this data and the products describes herein being at the sole risk of the user. Samples are provided to the requestor on an "AS IS, WHERE IS" evaluation purpose only basis, solely under the use and direction of the requestor, without warranty of any kind (either express or implied), including but not limited to any implied warranties of merchantability and fitness for a specific or general purpose and those arising by statute or by law, or from a cause of dealing or usage of trade. In no event, regardless of cause, shall AxiPolymer be liable for any indirect, special, incidental, punitive or consequential damages of any kind, whether arising under breach of contract, tort (including negligence), strict liability or otherwise, and whether based on this agreement or otherwise, even if advised of the possibility of such damages.