

HES-FR

Arichem HES-FR is a non-halogen mixed salt of aromatic sulfonates providing extremely effective FR performance. The product was developed using Arichem's high purity sulfonation technology.

Product Application

Arichem HES-FR is a high efficiency product used specifically for flame retarding polycarbonate (PC). The product is specifically designed for most effectiveness in translucent and opaque PC and PC/ABS. It is not intended for transparent PC. It is also used to decrease the amount of phosphate ester needed to provide flammability performance in PC/ABS (acrylonitrile butadiene styrene) copolymer formulations.

Product Description and Use or Loading Levels

Loading of Arichem HES-FR is typically less than 0.2% for UL 94 V0 @ 1.6 mm thickness flammability performance as shown is the following starting formulation:

PC (6MFI)	99.7%
Arichem HES-FR	0.1%
PTFE antidrip	0.2%

The active sulfonate content of Arichem HES-FR is much more than that of Potassium Perfluoro butyl sulfonate (KPBS) and other sulfonate FR products currently used in PC. FR effectiveness has been shown to be related to the sulfonate content.

A starting formulation for PC/ABS (75/25) for UL 94 V0 @ 1.6mm is suggested below.

PC/ABS (75/25)	90.0%
RDP	10.0%
Arichem HES-FR	0.2%
PTFE antidrip	0.2%

Other formulations should be discussed with the Technical Inquiry contact listed below.

More information, samples, and specifications for **Arichem HES-FR** are available upon request.

For Sampling or Technical Inquiries:

Flame Retardants Associates Inc. Phone: 360-826-4308 Email: jdinnes_fra@msn.com