



EcoFlameRetardant-S-338

**NONAFLUOROBUTANE-1-SULFONIC ACID POTASSIUM SALT**

**Chemical Name:** Nonafluorobutane - 1-sulfonic acid potassium salt

**Brand Name:** EcoFlameRetardant S-338

**Equivalent Grade:** FR-2025 of 3M

**CAS NO.:** 29420-49-3

**Chemical Formula:** C<sub>4</sub>F<sub>9</sub>KO<sub>3</sub>S



**Molecular Weight:** 338.19

**Chemical Structure:**

**Application:**

EcoFlameRetardant S-338 is extremely effective as a flame retardant additive with premium performance in polycarbonate at very low additive levels. EcoFlameRetardant S-338 has been found to be an effective flame retardant in polycarbonate at use levels as low as 0.06%-0.08% by weight. It is chemically and thermally stable to temperatures greater than 450°C, making it suitable for use in engineering resins. It provides excellent performance without affecting the processing of the resin.

One advantage of the low use levels necessary to provide effective flame retardancy is that EcoFlameRetardant S-338 can be formulated to produce optically-clear, haze-free grades of polycarbonate for extrusion and molding. What's more, EcoFlameRetardant S-338 additive does not contain any bromine or chlorine and has been found effective as a flame retardant without the use of synergists.

For most effective incorporation, it is recommended that the additive be initially dispersed into a 10% or more masterbatch and then compounded into the final plastic blend. Dispersion can be achieved effectively with typical polycarbonate processing equipment.

Analysis Item		Best grade	First Grade
Appearance		White powder	White powder
M.P	c	271 Min	278
Water Solubility	Ob	5 Max	3.27
LOO	Ob	0.50 Max	0.36
F	ppm	50 Max	12
Iron Content	mg/kg	5.0 max	Qualified
Isomers and Unknowns by HPLC %		5.0 max	2.26
PH (5% in H <sub>2</sub> O)		6.0-7.0	6.7
Assy	Ob	98 Min	98.3

**Packing:**

EcoFlameRetardant S-338 is packed in 25kg fiber drums.