



Avantra® Ignition Resistant High Impact Polystyrene Compounds

With more than twenty years of compounding and development experience in flame retarding High-Impact Polystyrene (HIPS) Polymer Products Company offers the broadest range of ignition resistant high-impact polystyrene (IRHIPS) products in North America. Our Avantra product line, based on non-decabromodiphenyl ether technologies, is internationally recognized for its quality, consistency, and leading edge performance. Avantra IRHIPS products contain brominated flame retardants with antimony oxide as the synergist. All ingredients are encapsulated in polymer providing the user with products that are safe and easy to handle, use, and store.

Avantra IRHIPS can be processed in the typical processing methods used for polystyrenes and are utilized in a broad range of applications including television cabinets, business machine enclosures, electronic instruments and appliance components.

Avantra Ignition Resistant Polystyrene Product Selection Guide

ENVIRONMENTALLY FRIENDLY DBDPO FREE GRADES

Product	MFI (g/10 min)	Tensile Strength at Yield (psi)	Elongation at Break (%)	Flexural Modulus (psi)	Notched Izod Impact (ft-lbs/in)	Vicat Softening Temp (°C)	Specific Gravity, 73°F (g/cc)	Flame Rating (UL-94 (0.063"))
Avantra 8530B	13.5	3650	55	320,000	2.0	94	1.15	V-0 / 5VB(0.125")
Avantra 8930	10.0	3700	60	310,000	2.4	100	1.07	V-2
Avantra 8130	4.5	3750	70	320,000	2.2	100	1.15	V-0/ 5VA(0.092")
Avantra 8731	4.0	4150	50	305,000	3.3	-	1.16	V-0
Avantra 8330	2.5	6000	13	400,000	1.3	219	1.08	V-2
Avantra 8030	10.0	3500	80	290,000	2.1	207	1.14	V-0

Processing

Although Avantra IRHIPS can be processed by any method applicable to polystyrene-based plastics; it is recommended that the melt temperature should not exceed 250 °C.



Handling and Safety

Avantra® IRHIPS are not known to have any ill effect on workers in an adequately-ventilated area when it is processed by typical methods used for polystyrene-based plastics. During processing of Avantra IRHIPS, small quantities of styrene monomer may be released into the atmosphere. At styrene vapor concentrations below 20 ppm no negative effects on health are expected. In our experience, the concentration of styrene does not exceed 1 ppm in well-ventilated workplaces - that is where five to eight air changes per hour are made.

Packaging and Samples

Avantra IRHIPS are supplied in Gaylord boxes. They should be stored in original containers in a cool, dry place. Avoid direct exposure to sunlight. Avantra IRHIPS can also be stored in silos. Samples are available on request by calling Polymer Products' toll-free order number: 1-800-836-8589.

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