



copolymers for alloys by



acrylate copolymers by



DOW ELVALOY™ IMPACT MODIFICATION OF PBT & PET POLYESTER





Dow Elvaloy™ PTW and Elvaloy™ 4170 can achieve super-tough impact performance at room temperature as well as providing excellent cold temperature impact and are the highest performing impact modifiers for use in polyester compounds. The epoxy functionality in Elvaloy™ PTW and Elvaloy™ 4170 can also improve the hydrolysis resistance of polyester compounds.

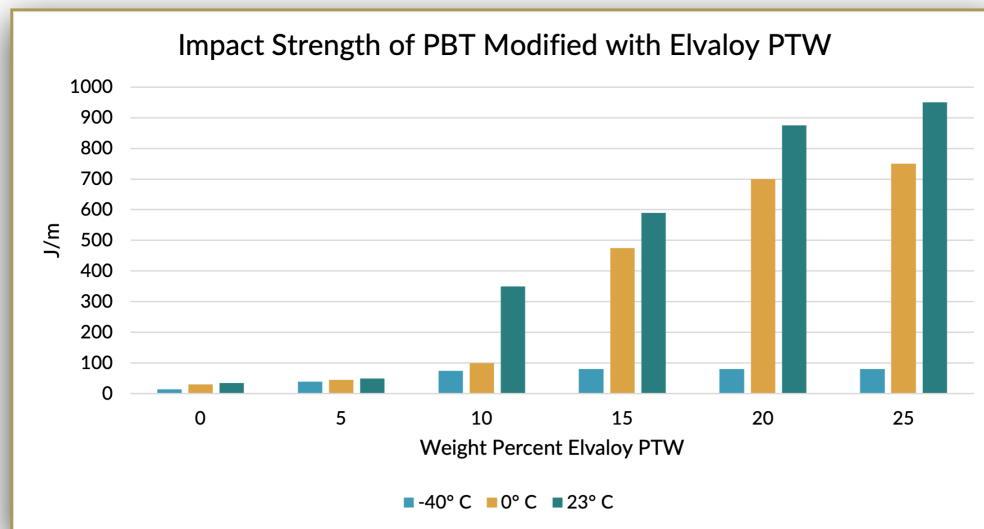
Elvaloy™ AC acrylate copolymers are used as general-purpose impact modifiers which can also act as a processing aid to improve the flow properties of the final polyester compound. Blends of Elvaloy™ PTW (reactive modifier) and Elvaloy™ AC (non-reactive modifier) are often utilized to provide the best balance of impact performance, flow properties and cost.

PROPERTY	UNITS	TEST METHOD	ELVALOY PTW	ELVALOY 4170	ELVALOY AC 1125	ELVALOY AC 1224	ELVALOY AC 1330	ELVALOY AC 1820	ELVALOY AC 34035
Methyl Acrylate Content	%	---	---	---	25	24	30	20	---
Butyl Acrylate Content	%	---	High	High	---	---	---	---	35
Reactive Modifier	---	---	GMA	GMA	No	No	No	No	No
Density	g/cm ³	ASTM D792	0.94	0.94	0.944	0.944	0.950	0.942	0.930
Melt Flow Rate	g/10 min.	ASTM D1238	12	8	0.5	2	3	8	40
Melting Temperature	°C	ASTM D3418	72	72	90	91	85	92	90
FDA 21 CFR 177.1340(a)	---	---	No	No	No	Yes	No	Yes	No
Loading level for general purpose impact modification			10 to 15%	10 to 15%	10 to 15%	10 to 15%	10 to 15%	10 to 15%	10 to 15%
Loading level for cold temperature impact modification			10 to 15%	10 to 15%	---	---	---	---	---
Loading level for super-tough impact modification			15 to 25%	15 to 25%	---	---	---	---	---

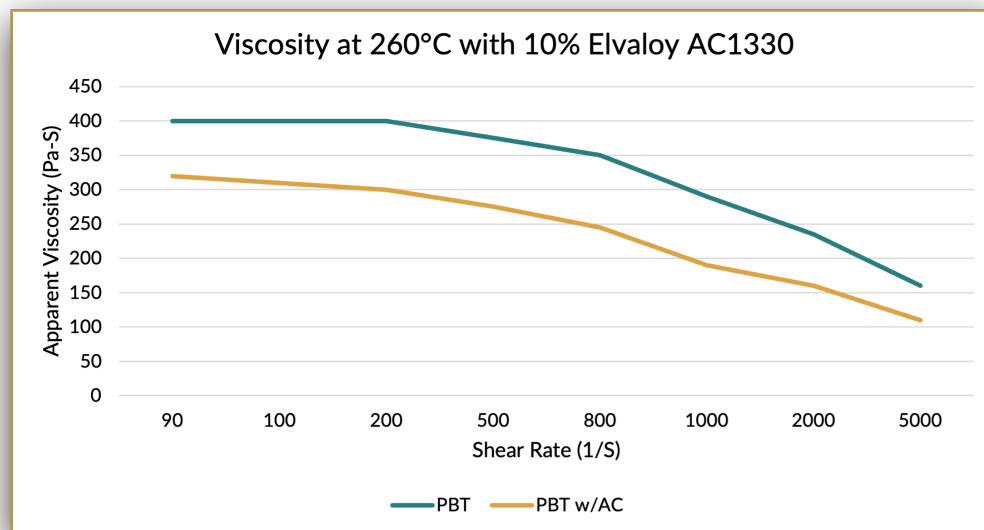
®™ Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

1/10/2023 The information presented in this document was assembled from literature of the resin product producer(s). The information is believed to be accurate however Entec Polymers ("Entec") makes no representations as to its accuracy and assumes no obligation or liability for the information, including without limitation its content, any advice given, or the results obtained. ENTec DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING FITNESS FOR A PARTICULAR PURPOSE. The customer shall use its own independent skill and expertise in the evaluation of the resin product to determine suitability for a particular application and accepts the results at its sole risk.

EFFECT OF ELVALOY PTW ON THE IMPACT PROPERTIES OF PBT



EFFECT OF ELVALOY AC1330 ON VISCOSITY OF PBT



®™ Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow