

Property Enhancements with DuPont™ Elvaloy® AC

DuPont™ Elvaloy® AC brings property enhancement to a variety of polymers and polymer blends such as:

- Nylon/polyamide (PA)
- Polybutylene terephthalate (PBT)
- Polyethylene terephthalate (PET)
- Acrylonitrile butadiene styrene (ABS)
- Polypropylene (PP)
- Polyethylene (PE)
- PBT/ABS blends
- ABS/polycarbonate (PC) blends

Elvaloy® AC has Broader Compatibility with Polar and Non-Polar Resins

DuPont™ Elvaloy® AC has, due to its very special manufacturing process, a much more heterogeneous molecular architecture which provides a significant compatibility enhancement with almost all other polymers in blends and mixtures. For this reason, Elvaloy® AC is the ideal carrier for masterbatch products. As an example, the TEM micrographs in Figures 1 and 2 show the compatibility of polybutylene terephthalate (PBT) with Elvaloy® AC and a competitive ethylene-methyl acrylate copolymer resin (produced under a different manufacturing process).



Figure 1: TEM Image of PBT/T-EMA (MA, 24% (80/20%))

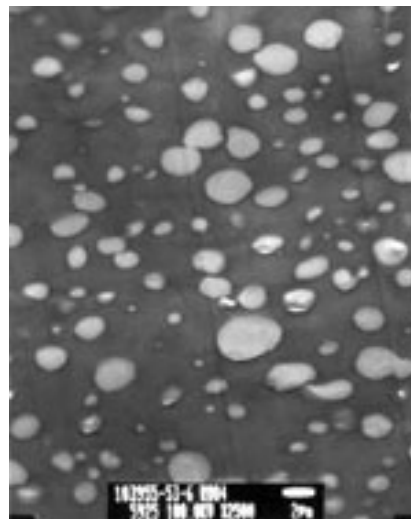


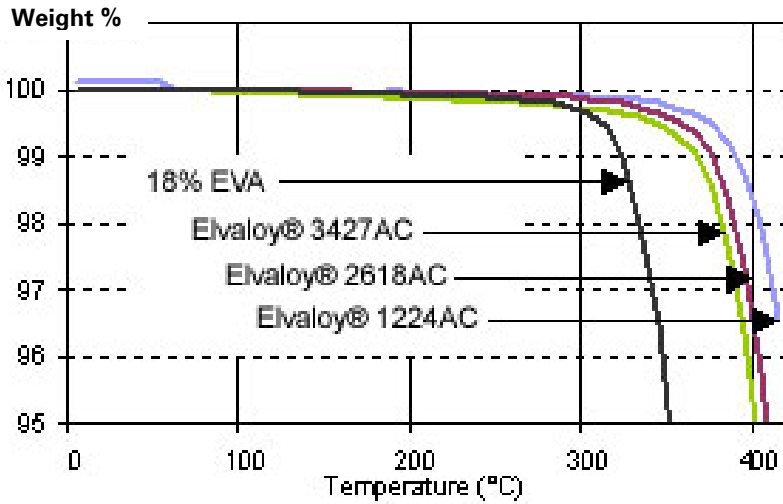
Figure 2: TEM Image of PBT/A-EMA (MA, 24% (80/20%))



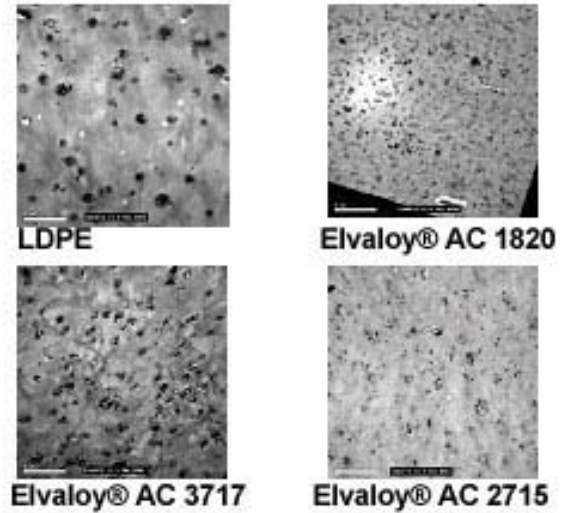
The miracles of science™

Elvaloy® AC has Superior Thermal Stability

TGA Curves for Selected Ethylene Copolymers in Nitrogen

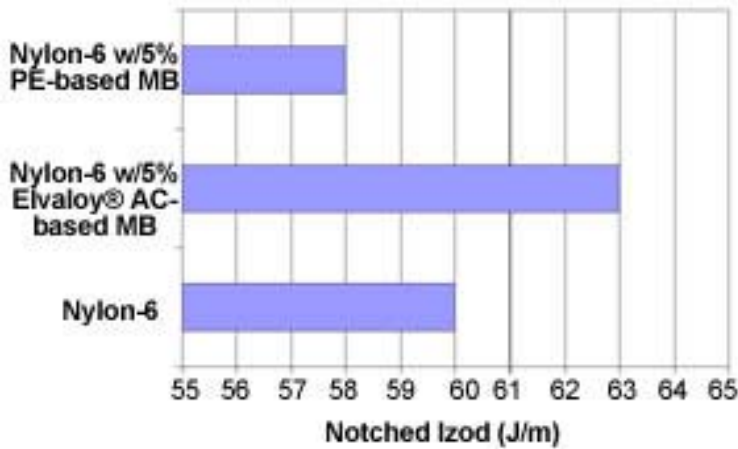


Elvaloy® AC has Good Filler Dispersion

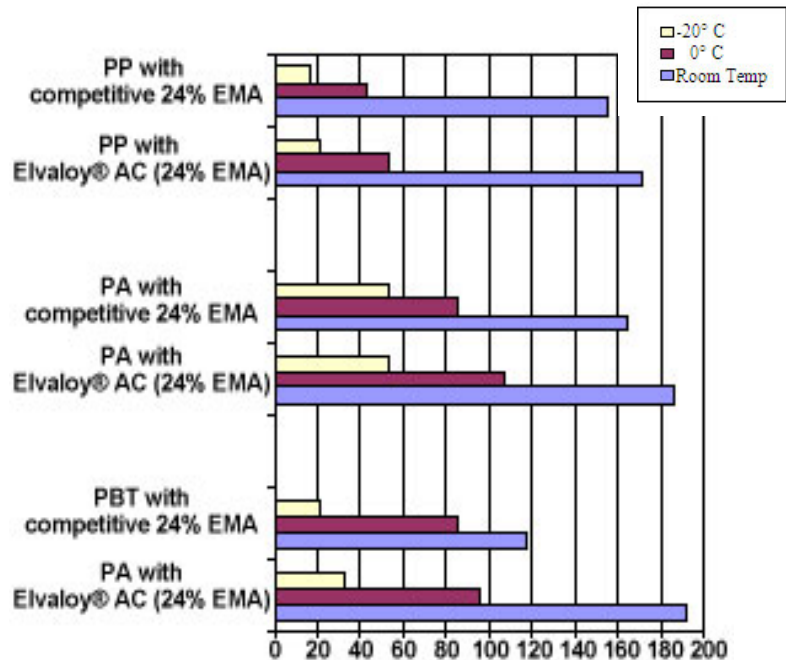


Improved Impact Performance

Nylon-6 with addition of 5 wt% TiO2 masterbatch based on PE vs. Elvaloy® 1820AC:



Elvaloy® AC improves impact resistance of other polymers as well:



**REGIONAL CONTACT CENTERS
for DuPont™ Elvaloy® AC
Masterbatch**

**DuPont Industrial Polymers
Wilmington, Delaware U.S.A.
Telephone +1 302 992 4557
Toll-free (USA) 800 438 7225**

**DuPont do Brasil, S.A.
Barueri, Sao Paulo, Brasil
Telephone +55 11 4166 8000
DuPont China Holding Co., Ltd.
Pudong New District, Shanghai
Telephone +86 21 3862 2888**

**DuPont de Nemours Int'l. S.A.
Geneva, Switzerland
Telephone +41 22 717 51 11**

elvaloy.dupont.com

The data listed here fall within the normal range of properties, but they should not be used to establish specification limits nor used alone as the basis of design. The DuPont Company assumes no obligations or liability for any advice furnished or for any results obtained with respect to this information. All such advice is given and accepted at the buyer's risk. The disclosure of information herein is not a license to operate under, or a recommendation to infringe, any patent of DuPont or others. Since DuPont cannot anticipate all variations in actual end-use conditions, DuPont makes no warranties and assumes no liability in connection with any use of this information.

CAUTION: Do not use DuPont materials in medical applications involving implantations in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract that is consistent with DuPont policy regarding medical applications and expressly acknowledges the contemplated use.

For further information, please contact your DuPont representative. You may also request a copy of DuPont POLICY Regarding Medical Applications H-50103-3 and DuPont CAUTION Regarding Medical Applications H-50102-3.

The DuPont Oval Logo, DuPont™, The miracles of science™, and trademarks designated with "®" are registered trademarks or trademarks of E.I. du Pont de Nemours and Company or its affiliates. All rights reserved.

Copyright © 2012 E.I. du Pont de Nemours and Company. All rights reserved.

K- (04/2012)



The miracles of science™