

Compatibilizer

PA/ABS PC/ABS

Polyscope offers a broad portfolio of styrene maleic anhydride (SMA) copolymers, compounds, aqueous solutions and styrene maleic anhydride N-phenylmaleimide (SMANPMI) terpolymers.

Polyscope's blend optimizers range offer optimal properties in polymer blends and alloys. The MA functionality in our polymer range offers solutions in compatibilization, coupling agents and chain extenders. Our Compibilizer grades are designed to compatibilize compounds of polycarbonate (PC) and acrylonitrile butadiene styrene (ABS) or acrylonitrile styrene acrylate (ASA), compounds of polyamide (PA) and ABS and compounds of polybutylene terephthalate (PBT) and ABS or ASA.

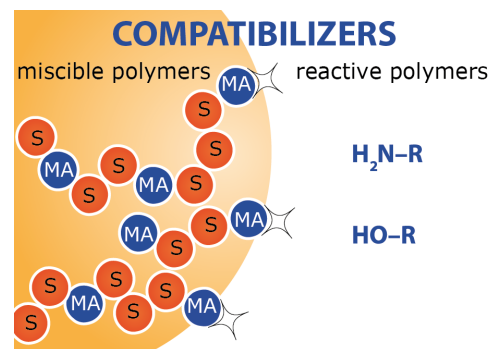
Blend optimization

Polymer blends are often immiscible and need to be compatibilized. Our compatibilizers optimize the interfacial tension, stabilize the morphology against high stresses and enhance the adhesion between the phases in the solid state. The compatibilization results in a large improvement of the mechanical properties of the polymer blend.

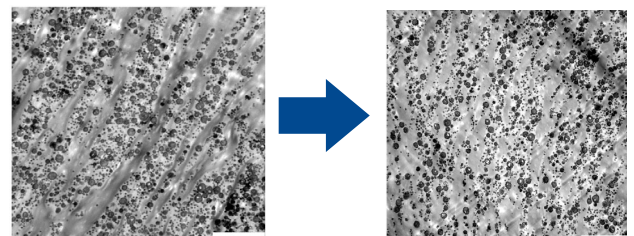
Potential Solutions for compatibilization

Miscible Polymers

	Reactive Polymers →		
	Polycarbonate	Polyesters	Polyamides
ABS/SAN	✓	✓	✓
ASA	✓	✓	✓
PS/HIPS	✓	✓	✓
SBC	-	✓	✓
PPO	-	-	✓
PMMA	-	✓	-



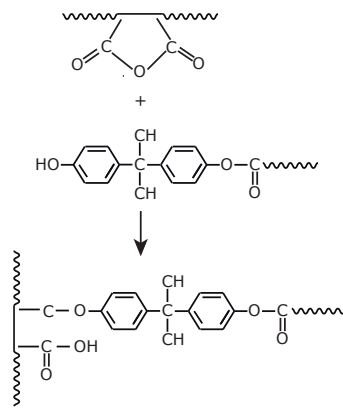
Dispersing effect



FRESH THINKING GREAT PRODUCTS

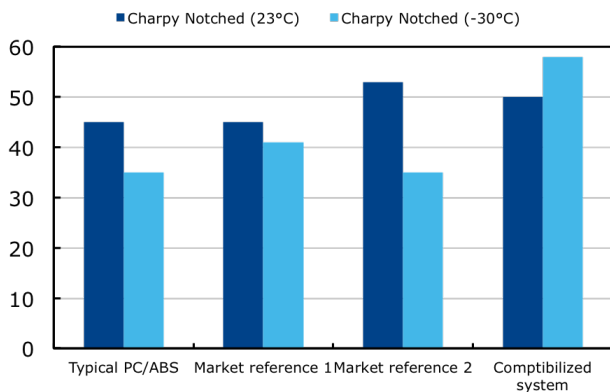
PC/ABS Blends

These blends are the most consumed blends in the market. It is well known especially in the automotive industry. Polyscope offers a solution by optimizing the morphology of these blends resulting in an optimized property profile. Different products are available for various blends ratios.



Optimized properties

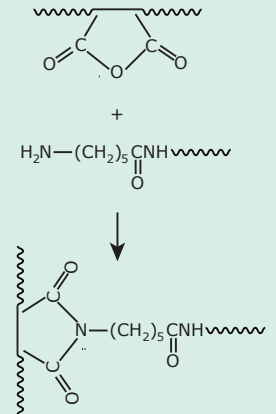
The addition of a compatibilizer in PC/ABS blends result into optimized morphology resulting in optimal impact properties.



Charpy Notched 23 °C	47
Charpy Notched -30 °C	51
Tensile Modulus	200
Elongation at break	63
Tensile Strength	47
MFI 260/5	20

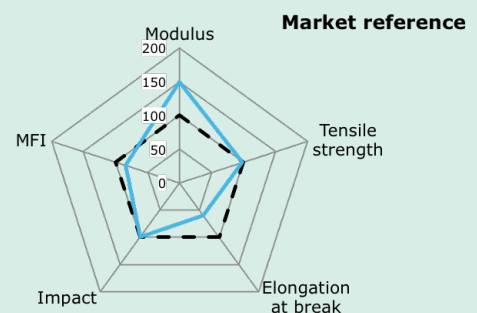
PA/ABS Blends

These blends offer the optimal balance of properties when combining the crystalline properties of PA and the amorphous properties of ABS. The combination of these properties makes it a very popular blend in the market. A compatibilizer is necessary in order to obtain these blends, Polyscope offers an optimized solution for PA/ABS blends in different ratios.



Great overall properties

The rapid reaction of MA with PA end groups require different type of products. Polyscope offers an optimized range for PA/ABS blends with different ratios.



Charpy Notched 23 °C	NB
Charpy Notched -30 °C	18
Tensile Modulus	1700
Elongation at break	280
Tensile Strength	33
MFI 220/10	28



Polyscope

Prins de Lignestraat 28
6161 CZ Geleen
The Netherlands

Contact

Phone +31(0) 46 75 000 10
info@polyscope.eu
www.polyscope.eu