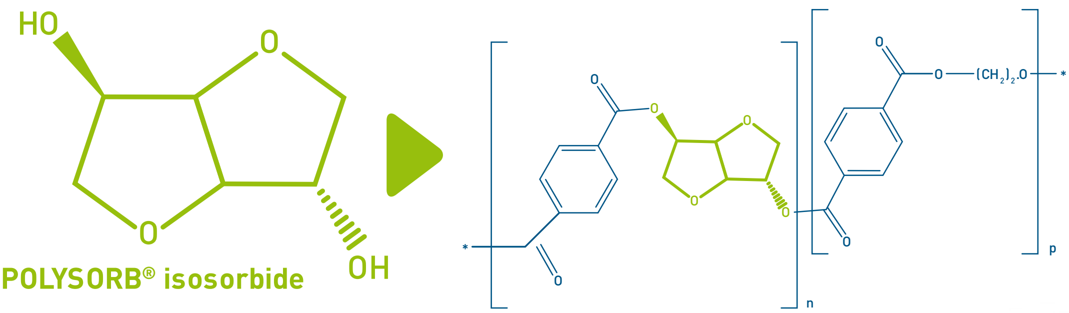
PERFORMANCE MATERIALS

Go beyond PET



POLYSORB® isosorbide

POLYSORB® Isosorbide

KEY BENEFITS

- Heat resistance
- Increased glass temperature
- Good chemical and mechanical resistance
- Optical properties

Rigid packaging

Technical polymers

Food contact packaging

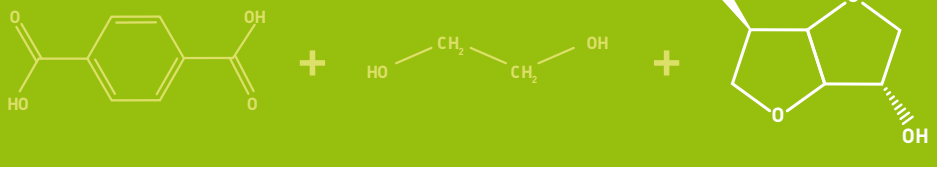
Heat resistant packaging

Water sport bottle

ROQUETTE

Offering the best of nature™

POLYSORB® Isosorbide

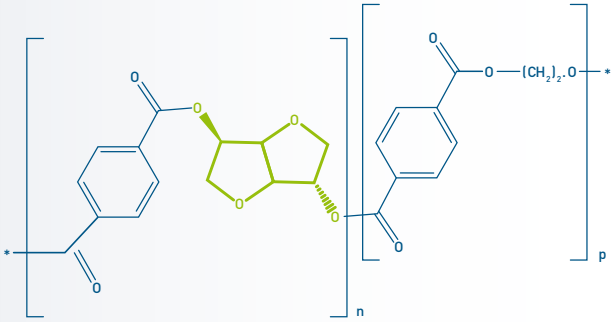


3 STEPS REACTION

Oligomerization step:
Formation of dihydroxy Oligomers of PET

Transesterification step:
Increase of molecular weight
Performed at molten state

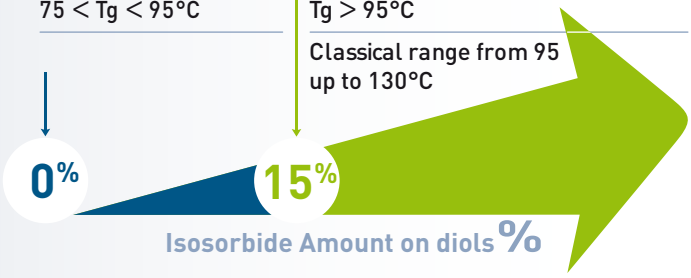
Solid State Polymerization:
Increase of molecular weight
Performed at solid state for crystallized products



Poly(ethylene-co-isosorbide) terephthalate

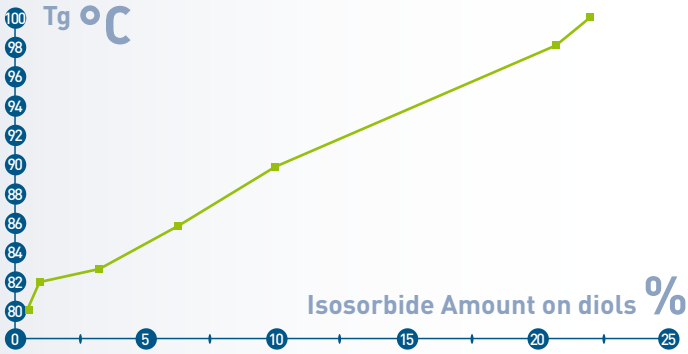
TUNED PROPERTIES WITH ISOSORBIDE

Semi-crystalline	Amorphous Polymer
PEIT	PEIT with or without co-monomers
75 < Tg < 95°C	Tg > 95°C
	Classical range from 95 up to 130°C



ISOSORBIDE IMPROVES

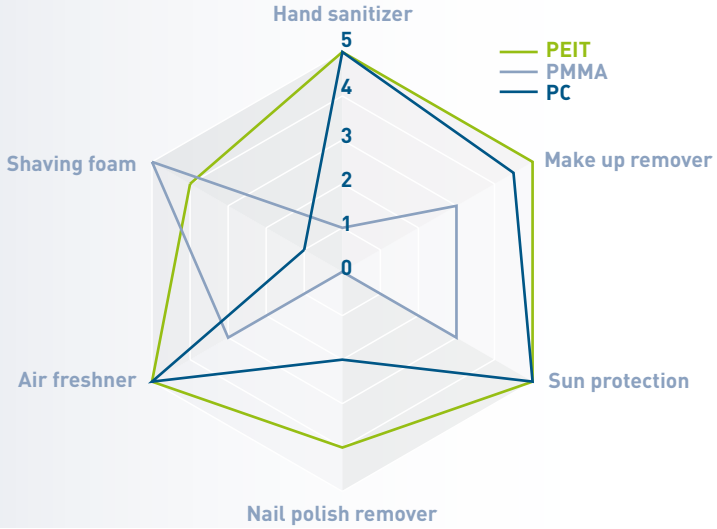
Heat stability (Tg)



Optical properties

	PET	PETg	PEIT
TOTAL TRANSMITTANCE	91%	91%	88-90%
HAZE 3,2mm	5%	1%	< 1%

Chemical Resistance



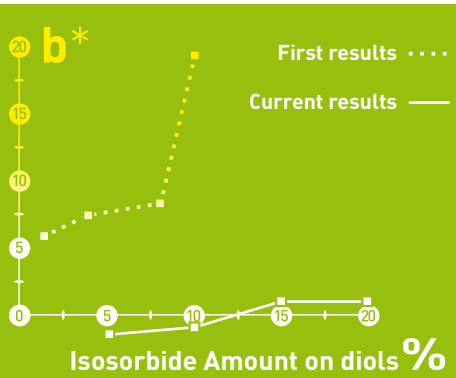
TIPS TO REDUCE COLORATION

High purity POLYSORB® Isosorbide from Roquette

Avoid Presence of Oxygen

Polymerization conditions (time, temperature, catalyst)

Use appropriate Additives



Our experts can help you to gain value in Polyesters with isosorbide

TO ORDER NOW
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FOR MORE INFORMATION
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