TOTAL
COMMITTED TO BETTER ENERGY

POLYSTYRENE IN DAIRY

A sustainable packaging solution

A PANEL OF SOLUTIONS

High Impact Polystyrene (HIPS)

Grade	*MFI* (5 Kg – 200°C) (g/10min)	*Vicat 5 kg* (°C)	*Elongation at break* (%)	*Specific Features*
8260	2.8	*90*	*> 60*	*Improved ESCR for high fat content*
7240	4.5	*87*	*60*	
3450	7.0	*95*	*55*	*High heat resistance*

7240 – The reference on the FFS market

General Purpose Polystyrene (GPPS)

Grade	*MFI* (5 Kg – 200°C) (g/10min)	*Vicat 5 kg* (°C)	*Elongation at break* (%)	*Specific Features*
1160	2.4	*101*	*3.0*	*High heat resistance*
1340	4.0	*93*	*2.5*	
1540	12	*86*	*2.0*	*Easy flow*

1540 – Best performances - processability balance

WHY CHOOSING POLYSTYRENE ?

Food safety & sustainability

Food safety

More than **50 years of safety** with Polystyrene **food packaging.**

Polystyrene fully complies with the Regulation (EU) 10/2011 amended up to the Regulation (EU) 2015/174

Sustainability

Polystyrene can **be recycled up to 20 times** maintaining its performances

Polystyrene is **environmentally preferable than plastic alternatives (i.e. paperboard)**

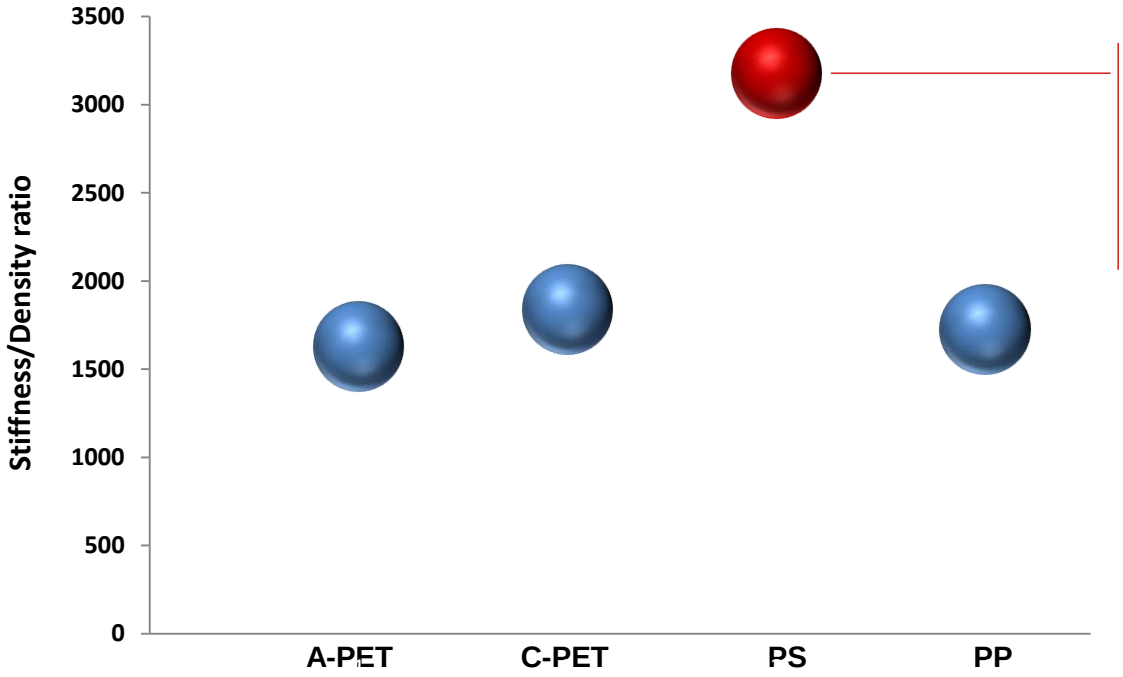
50% less energy *for a PS cup vs paperboard cup*

2 times less CO_2 *for a foam PS cup vs paperboard cup*

TOTAL

WHY CHOOSING POLYSTYRENE ?

Mechanical properties

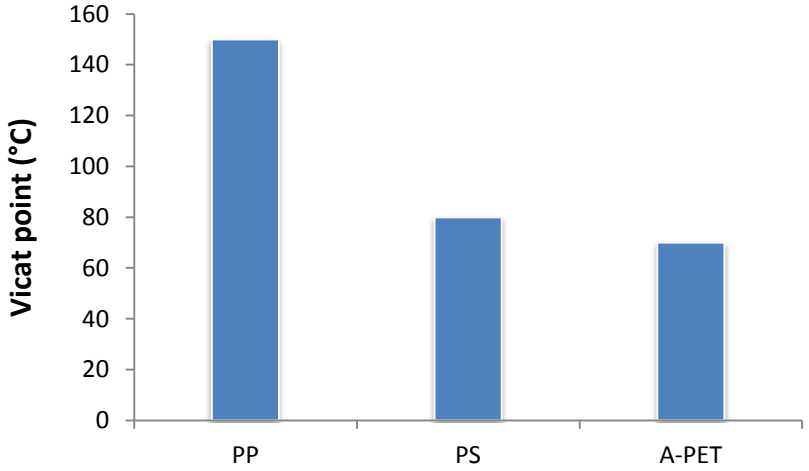


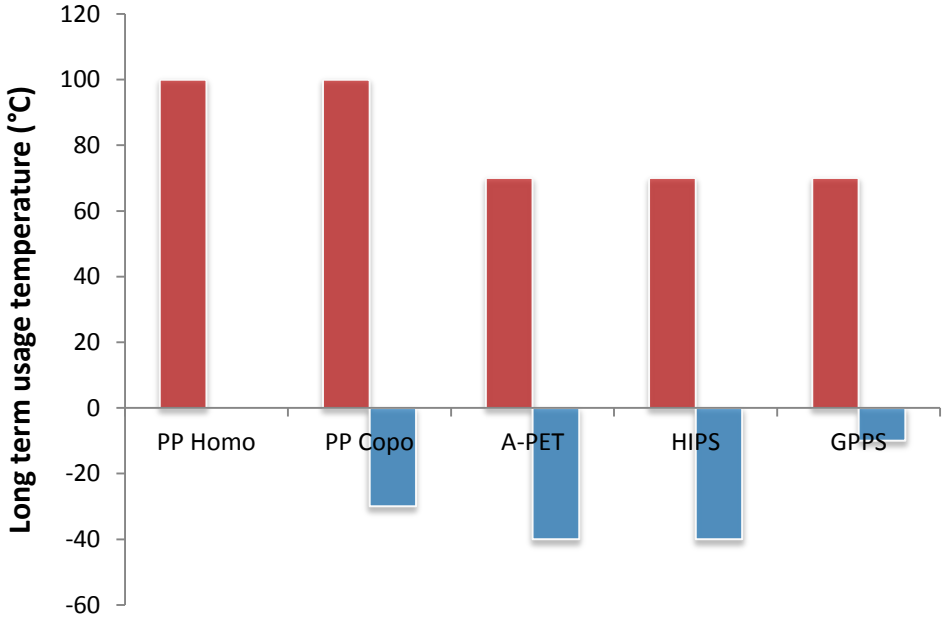
PS offers optimal performances for downgauging

At equivalent mechanical performances, cost of Polystyrene for a given article is in line with alternative materials like PET

WHY CHOOSING POLYSTYRENE ?

Thermal resistance



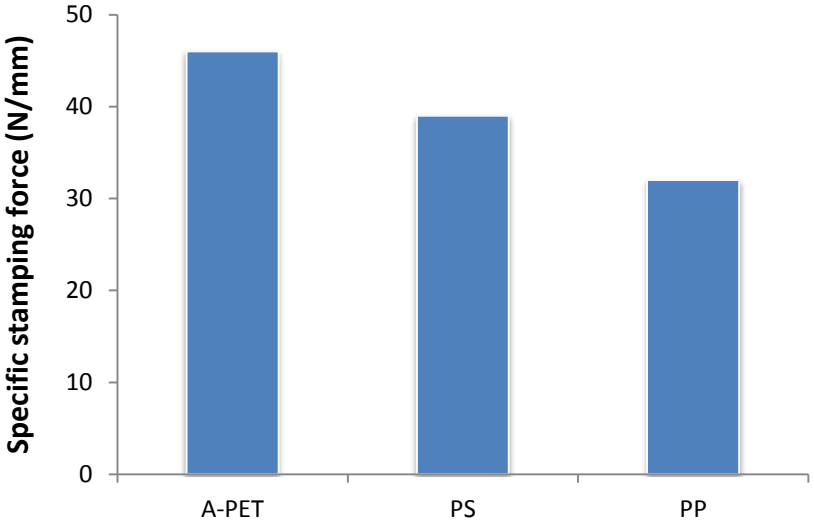


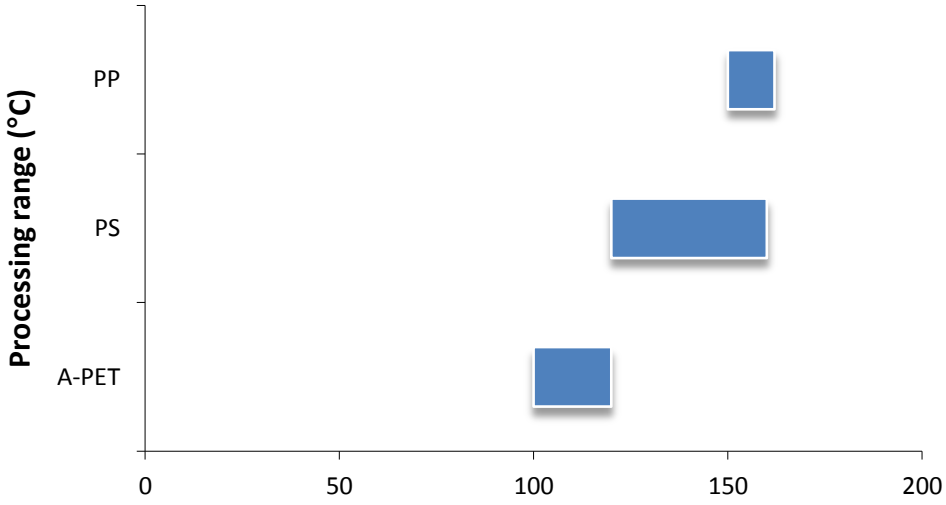
High temperature resistance : a PP strength

N°2 polymer : Polystyrene !

WHY CHOOSING POLYSTYRENE ?

Processing



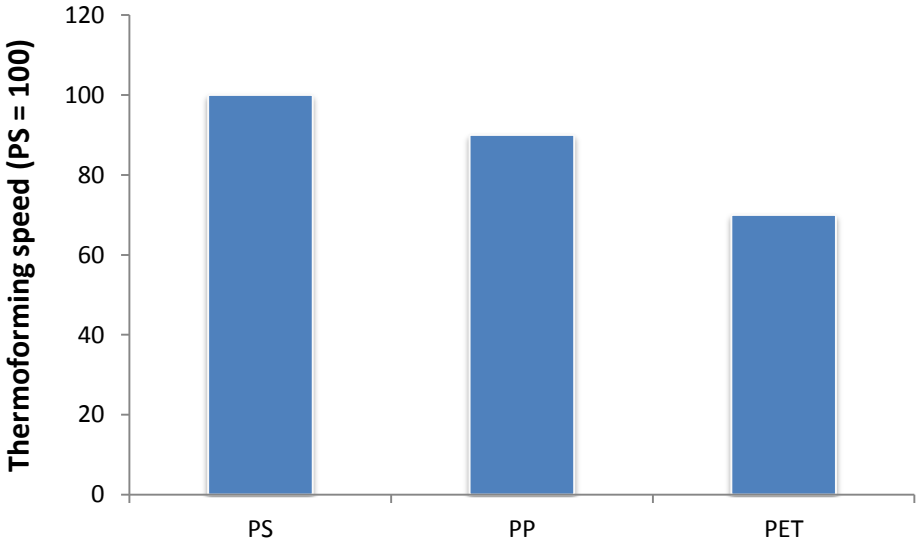


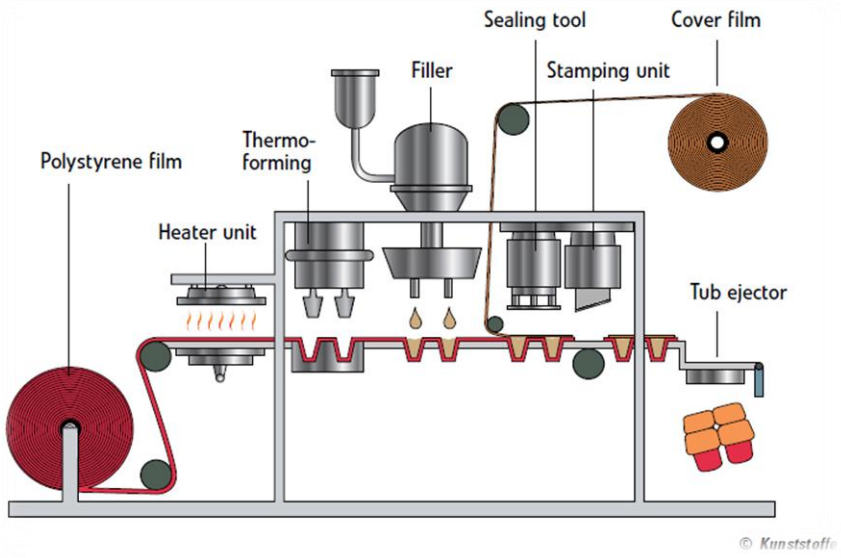
N°1 polymer in processing : Polystyrene

PET : the most difficult to thermoform

WHY CHOOSING POLYSTYRENE ?

Thermoforming speed





Polystyrene

Best in class in production !

PS : Lower processing costs vs. PET

(extruder temperature, dryer, cooling)

CONCLUSION

POLYSTYRENE

has definitely a major role

in Dairy market

and can offer sustainable solutions