

TOYO STYRENE GA series - Polystyrene for Optical Use -

- Characteristic point of Polystyrene

Lightweight

No bend with moisture

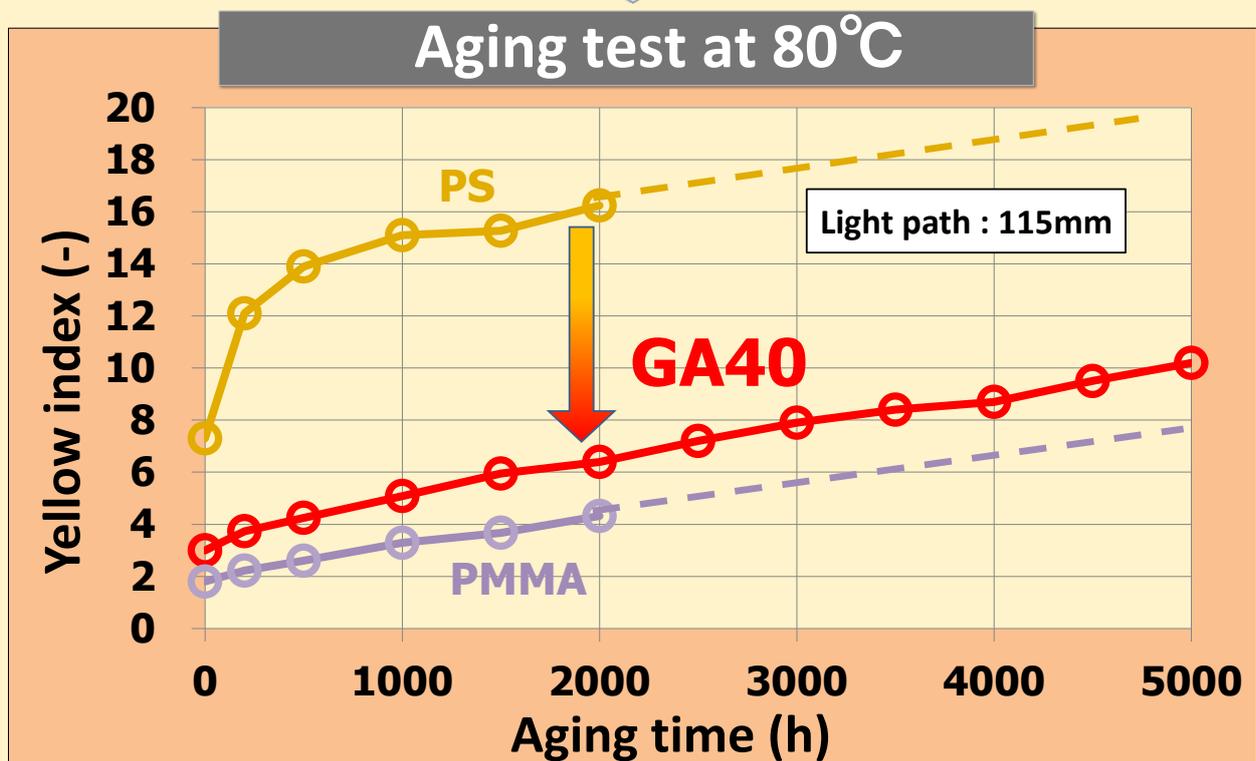
Easy to mold

- Advantages of GA

Excellent hue

Less yellowing

The optical properties of GA have become better.



* All data shown above are not as guaranteed value.

【Applications】

Light guide plates for TV set, Lightings, Signboard and more.



LCD TV (Backlight unit)



Signboard

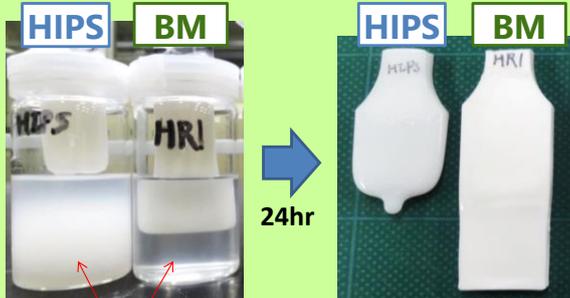


Lightings

TOYO Energyts BM series - Bioplastic -

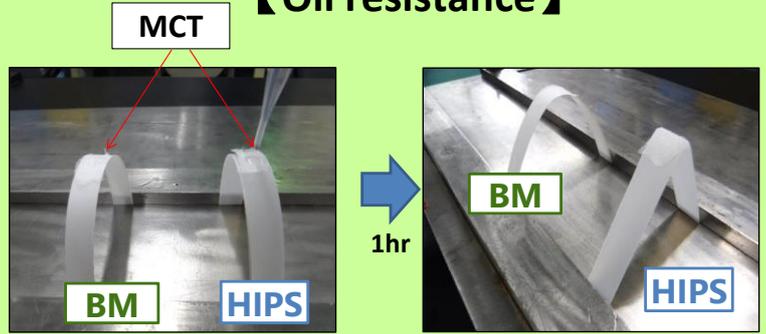
- Can be used for microwave oven.
- Excellent resistance to oil and chemicals.
- Polymer alloy of PLA/PS.
- Reduction of CO₂ emissions by 25~30%.

【Solvent resistance】



Solvent (Methyl Ethyl Ketone)

【Oil resistance】



MCT : Medium Chain Triglyceride

• BM100 did not break.

for Injection molding (BM100)

- 1) Crystallinity varies with forming conditions
- 2) Comparative Tracking Index

Features	unit	BM100 (PLA=30%)		HIPS for Injection molding
Crystallization Ratio ¹⁾	%	20	40	-
MFR (200°C)	g/10min	8		6
HDT (1.8MPa)	°C	59	82	73
Charpy impact strength	kJ/m ²	9	8	10
Density	kg/m ³	1095	1095	1040
CTI ²⁾	PLC	0 (600V ≧)		1 (400~600V)

* All data shown above are not as guaranteed value.

【Applications】

- Knife, fork, spoon, Cup, Dish



for Extrusion-foaming (in development)

【Applications】 • Tray, Bowl



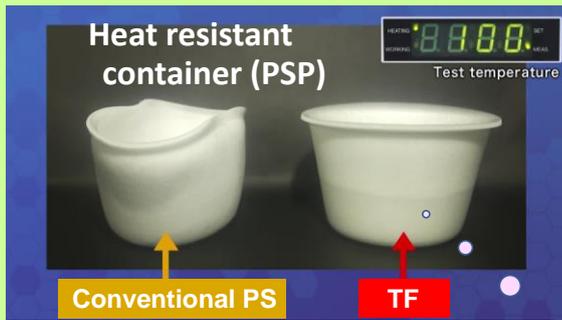
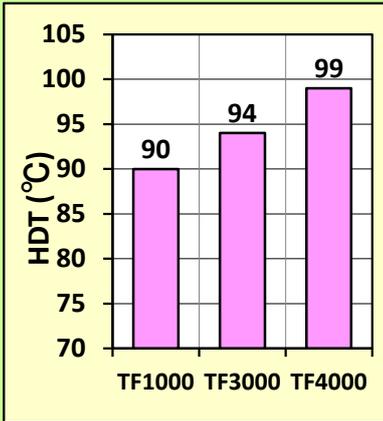
【Heat resistance】

Place the chinese food on the tray, heated in a microwave for 3 minutes.



TOYO STYRENE TF series - Heat Resistance Polystyrene -

TF is a polystyrene with good heat resistance.
Can be used for heat resistant BOPS and PSP.

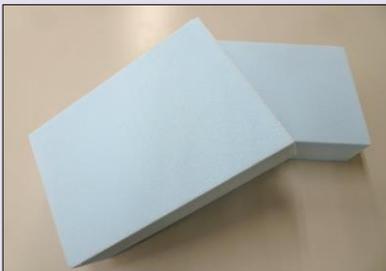


Can be used for microwave oven.
PSP has insulation ability, so you can hold it.

TOYO STYRENE MBX160 - Non-HBCD Flame Retardant Masterbatch -

- MBX160 is Non-HBCD FRMB
 - High thermal stability & high concentration .
 - Based on polystyrene composed with brominated polymer type flameretardant.
 - Developed by using original technology of TOYO STYRENE CO.,LTD.
- *HBCD: HexaBromoCycloDodecane

【Applications】 XPS board, Building insulation



Building insulation



Example of use

【Comparison of thermal stability】

	MBX160	Comparison
220°C 45min		
220°C 60min		

TOYO STYRENE ES150 - Flame Retardant Polystyrene -

We have 5VA grade that is usually difficult in PS systems.

The world's-first performance*1)
*1) except for SPS

「ES150」 UL standard “1.5mm/5VA”

It has been adopted in response to needs such as consumer electronics, OA equipments and housing equipments.



Wattmeter box



Electrical box for air conditioner



Copying Machine