

『 Poketone Application 』

- Automobile -

1. Connector

Summary

- Current material : PBT, Modified PBT
- Product : Modified PK

Value In Use

- Mechanical property
- Better impact resistance at low temperature (-30°C)



▶ Data

Item		Unit	Method	PK	PBT
Charpy Notched Impact strength	23°C	KJ/m ²	ISO 179/1eA	18.5	3.0
	-30°C			4.5	0

* Drop Impact Test (-30°C)



<PK>



<PBT type 1>



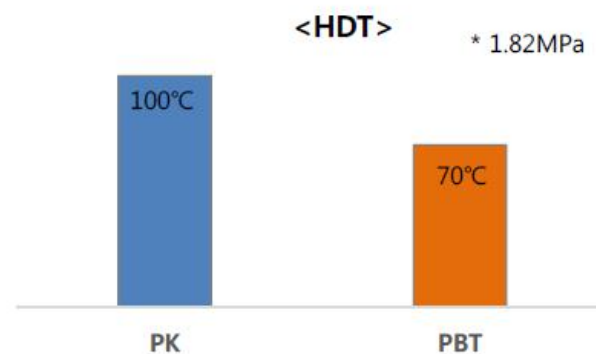
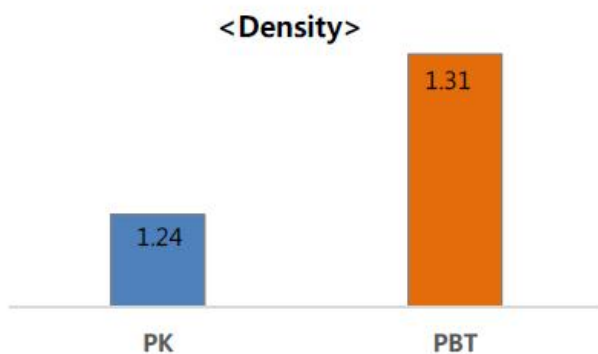
<PBT Type 2>

1. Connector

Value In Use

- Weight reduction : “6%” better than PBT
- Thermal property : Less deformation by heat

► Data



- Moldability : Better processability for thin wall

► Data

Item	unit	Method	PK (240°C, 2.16kg)	PBT (250°C, 2.16kg)
Melt Flow Index	g/10min	ASTM D1238	60	28

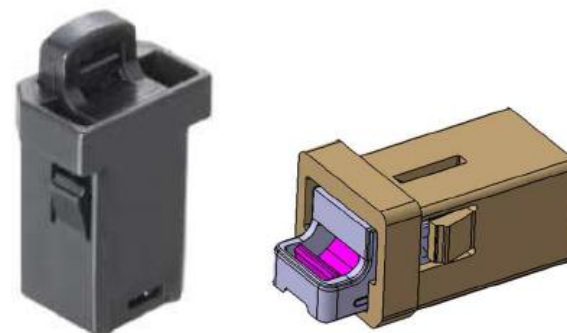
2. Overhead Console Latch Housing

Summary

- Current material : Modified POM
- Product : PK+GF10%

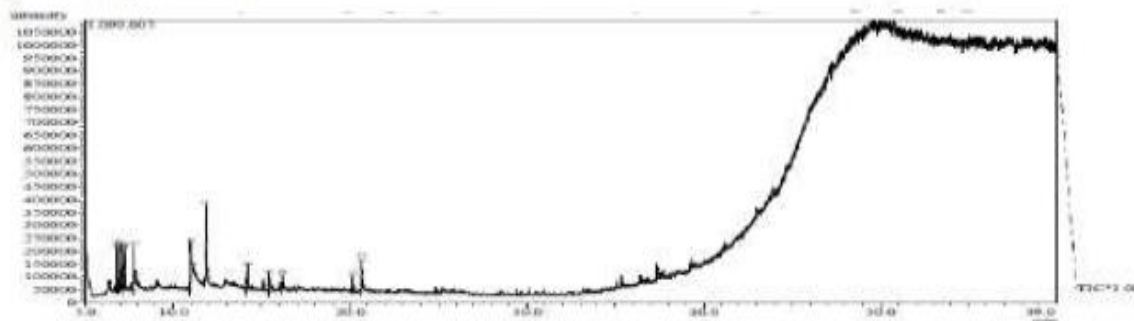
Value In Use

- Noise reduction compared to POM



▶ Data

* Method : MS300-55



430	Temperature (°C)	Tube	Trap	Valve	Transfer line
		250	250	200	250
	Flow (ml/min)	Sample	Trap Hold	Desorb.	Purge
		25	5	10	5
split ratio		50:1			
Column		VF-1, 60 m x 0.32 mm x 0.25 µm			
Carrier Gas		He, 1.0 ml/min			
50	Oven Temperature	55 °C (30min) → 80 °C/min → 200 °C (30min)			
	Ion Source Temperature	200°C			
	Transfer Temperature	200°C			
Detector Mode		EI (Electron Impact)			
MS	Electron Energy	70 eV			
	Detector Model	TK2000, P/N: 41-04			

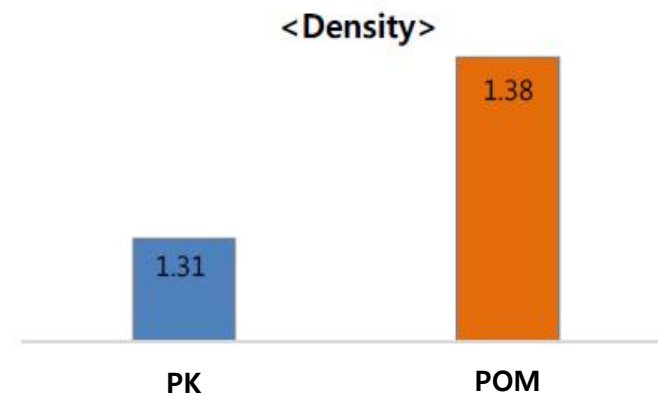
项目	笨	甲苯	乙苯	二甲苯(-m,-p,-o)	苯乙烯	甲醛	丙烯醛
规定量(µg/m ³)	30↓	1000↓	1600↓	870↓	300↓	250↓	50↓
分析结果(µg/m ³)	3	25	ND	15	35	ND	10

2. Overhead Console Latch Housing

- Weight reduction : “5%” better than PBT

▶ *Data*

Item	PK+GF10%	Modified POM
Density	1.31	1.38



3. Radiator End Tank



Summary

- Current material : PA66+GF33%, PA66/PA612+GF33%
- Product : PK+GF33%

Customer Requirements

- Chemical Resistance
 - CaCl₂, ZnCl₂, Ethylene Glycol
- Moldability
- Dimensional stability
- Hydrolysis resistance

4. Door Frame Inner Cover



Summary

- Current material : PA6+GF15%
- Product : PK+GF15%

Customer Requirements

- Dimensional stability
- Impact Resistance
- Moldability
- Wear resistance

5. Sun Visor Pivot Arm



Summary

- Current material : PA66+GF33%
- Product : Under Developing

Customer Requirements

- Wear resistance
- Impact Resistance
- Dimensional stability

6. Carrier Plate



Summary

- Current material : High viscosity POM
- Product : Under Developing

Customer Requirements

- Wear resistance
- Low formaldehyde elution

7. Power Window Switch



Summary

- Current material : ABS
- Product : Under Developing

Customer Requirements

- Impact Resistance
- Wear resistance
- Volatile material reduction

8. Center Fascia U Clip



Summary

- Current material : POM
- Product : Under Developing

Customer Requirements

- Impact Resistance
- Wear resistance
- Volatile material reduction

9. Garnish



Summary

- Current material : ABS
- Product : Under Developing

Customer Requirements

- Chemical Resistance
 - Sun cream
- Wear resistance
- Volatile material reduction