

Technical Datasheet

PL2181

PL2181 resin is a grafted coupling agent based on polyolefin elastomer combining functional groups. PL2181 can improve the polarity of the plastic to increase the compatibility between different materials.

PROPERTIES	Test Method	Unit	Value
THERMAL			
Melting point	ASTM D2117	°C	< 50
PHYSICAL			
Specific Gravity	ASTM D792	-	0.874
Melt Flow Rate (190°C/10Kg)	ASTM D1238	g/10min	5
Hardness	ASTM D2240	Shore-A	68
MAH Graft level	Polyalloy Method		Medium
PROCESSING			
Max processing temperature			< 300°C

Additional information

The mechanical properties of end products will be affected by adding ratio. The Heat Deflection Temperature (HDT) may be decreased by adding PL2181 to engineering plastics. PL2181 resin may affect the flammability of end products. All resins are not recommended to be processed to the products which will contact the foods immediately.

(1) Values shown are based upon specific condition. Variations within normal tolerances are possible for various colors. Actual properties of individual batches will vary within specification limits.

Reported values are only as guidelines for designers and processors of modified thermoplastics. Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by pellet cut, size, color, molding techniques applied, and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed. The values of specification listed were collected and shown to the best of our knowledge. However, we ask for understanding that we can not take over liability for the results in individual cases and for the suitability and completeness of our recommendations, and can not guarantee that no third-party patent rights are restricted. It is the responsibility of the customer to determine that the product is safe, lawful and technically suitable for the intended use.

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Packaging and Drying

Water contain will affect the mixing process and the surface quality of end products. The moisture level of all resins is controlled under 0.1% (1000 ppm) before packaging. Drying of before process is not necessary. Due to low heat deflection temperature of specific grades, over heating on resins may cause agglomeration.

The packages of resins are shown in the following table. Special package can supplied upon request. Each package will be attached tag which shows the product grade, the lot number, the net weight. The products will be stacked on pallet. Maximum weight of each pallet is 1,000 kg.

	25	500	750	1,000
Paper bag *1	●			
Aluminum foil				
Bulk bag *2				
Paper box				

(1) Polyethylene laminated for interior layer.

(2) Polypropylene woven bag

Storage

Please store resins indoor with room temperature. Avoid to be in touched with water, oil or solvent. Specific grades of must be stored at the environment no more than 45°C. The dust of package may cause contami- nation when it be opened. Supplied packaging should be kept closed and undamaged. Partial bags should be sealed before re-storage.

The resins contain functionalized additives to perform its properties, long term storage may affect the benefit of resins which is not recommended. The normal storage warranty will be 2 years.

Regrind

The resins are thermoplastic masterbatch, regrind the end products will not have as good benefit as original resins which is strongly unrecommended.

Product Safety

For the safety properties of the material, we refer to our MSDS which can be requested from our sales offices.

During practical operation we advise to wear personal safety protections for hand, eye, and body.

Caution! Handling or processing the resins may generate a dust which can cause irritation of the eye, skin, nose, and throat.

For Additional Information

Customer service

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+ (886) 2336-2202

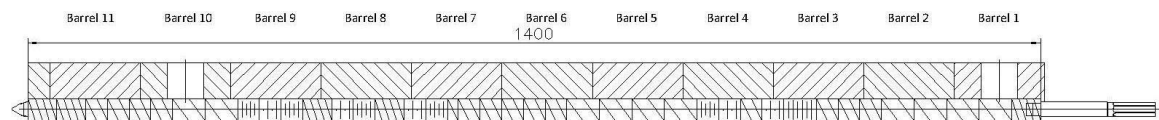
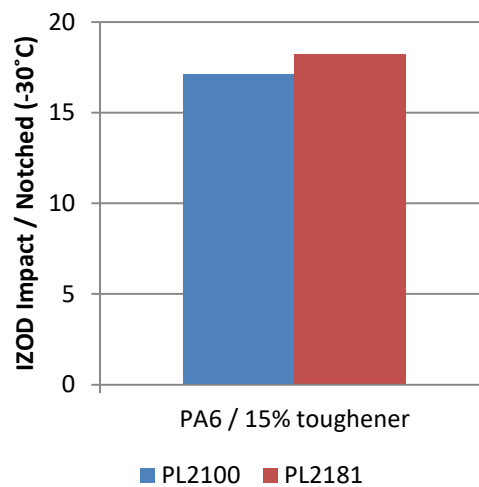
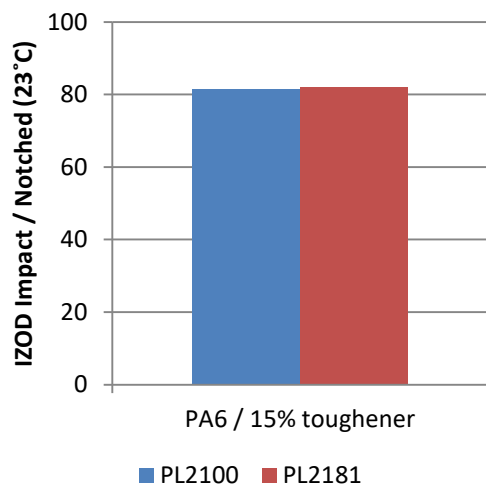
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PL2181 - Polyamide Toughening

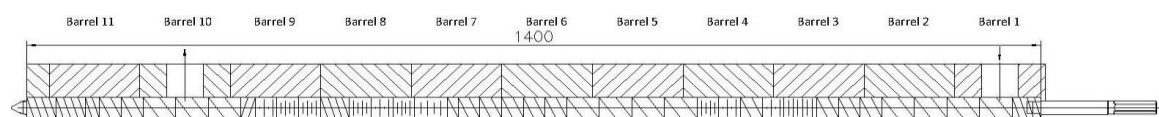
Polyamide 6 or 66 are very popular engineering plastics. However, most applications of polyamide require to improve impact performance at ambient or low temperatures. For these applications, toughened grades of nylon can be used.

We has many grades with polymer grafted technologies that can be used for nylon toughening. These grades typically combine increased impact properties, with good adhesion to the nylon. The adhesion is achieved by grafting functional group to certain polymer, the grafted polymer can be the toughener after compounding with polyamide.

For polyamide toughener, We has PL2100, PL5110 and PL6101 for different purpose. The most popular grade is PL2100 which is grafted polyolefin elastomer made by since 2010. PL2181 is a new grade similar to PL2100 in economy version.



PL2100 uses less shear on polyamide compound



PL2181 needs more shear on polyamide compound