

Functional TPU Compound / Colorants for TPU

Application

Molding method	Application	
Injection molding	Automotive parts	Ball joint, Dust cover, Tire chains, Side molding
	Machinery/Industrial components	O-ring, Sealing materials, Gears, Connector
	Sporting goods	Sports shoes, Fin, Goggles
	Others	Watch band, Caster, Roller, Heel top piece of shoes
Extrusion molding	Hose/Tube	Pressure-resistant hose, Tube, Inner part of fire hose
	Belt	Conveyor belt, Air mattress, Tarpaulin, Driving belt, Round belt
	Cable	Electrical wire/Cable covering, Computer wiring, Curl cord
	Others	Ropes, Medical disposables
Calendar molding	Conveyor belt, Film, Flexible container	

Characteristics

TPU (thermoplastic polyurethane elastomer) having well-balanced characteristics

- A wide product lineup of functional TPU compounds and colorants for TPU as shown below.
- We also offer other functional products, such as antifungal / antibacterial type (BG series) and electron beam curing type (EB series).

Representative Products

Product name	Characteristics
EC (Conductivity type)	Excellent in mechanical properties/processability <ul style="list-style-type: none"> •Exhibiting wide conductive region : resistivity $10^2 \sim 10^{10}\Omega$. •Including transparent antistatic and low-hardness conductive grades.
FG (Flame-resistant type)	Excellent in mechanical properties/processability <ul style="list-style-type: none"> •Also available for high flame-retardant grade (UL-94V-0). •Including halogen-free grade.
FR (Abrasion-resistant type)	Excellent in abrasion-resistance and low friction coefficient, as well as in mechanical properties and processability <ul style="list-style-type: none"> •Higher abrasion-resistance (4 ~ 5times as compared with conventional TPU). •Lower dynamic friction coefficient(a half as compared with conventional TPU).
CP/CPE (Colorants)	Applicable to colorants for thermoplastic polyurethane <ul style="list-style-type: none"> •Excellent in color development stability because of the excellent pigment dispersibility. •Also available for color matching upon request.
CPL (Laser marking type)	Excellent in mechanical properties, processability and laser marking performance <ul style="list-style-type: none"> •Applicable to laser marking by using 1,060nm-1,070nm laser beam. •Also available for color matching upon request.
EM (Crosslinking agent)	Developed for improving abrasion-resistance, heat-resistance, chemical-resistance and compression set of thermoplastic polyurethane <ul style="list-style-type: none"> •Capable of forming mesh structure in resin during heat treatment after blending TPU and resin. •Capable of improving various characteristics.