

# 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 • 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 • 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 • 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 • 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 • Applicable to laser marking by using 1060nm-1070nm 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 • Capable of forming mesh structure in resin during heat treatment after blending TPU and resin • Capable of improving various characteristics

