

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, Various types of 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	Electric wire/ Cable covering, Computer wiring, Various types of curl cord
	Others	Various types of ropes, Disposable products for medical application
Calendar molding	Conveyor belt, Film, Flexible container	

▶ Characteristics

- Capable of providing thermoplastic polyurethane elastomer (TPU) well-balanced in characteristics, and additionally the following functional TPU compound/colorants for TPU
- Also capable of providing other functional grades, such as antifungal/antibacterial type (BG) and electron beam curing type (EB)

▶ Representative Products

Product name	Characteristics
EC (Conductivity type)	Excellent in mechanical properties/processability •Exhibiting wide conductive region : resistivity $10^2 \sim 10^{10}\Omega$ •Capable of providing transparent antistatic/low-hardness conductive types
FG (Flame-resistant type)	Excellent in mechanical properties/processability •Capable of providing high flame-retardant type (UL-94V0) •Also capable of providing halogen -free type
FR (Abrasion-resistant type)	Exhibiting excellent abrasion-resistance/low friction coefficient, as well as excellent mechanical properties/processability •Higher abrasion-resistance (4 ~ 5times as compared with conventional TPU) •Lower dynamic friction coefficient(a half as compared with conventional TPU)
CP/CPE (Coloring agent)	Applicable to coloring of thermoplastic polyurethane •Excellent color development stability because of excellent pigment dispersibility •Capable of matching color upon request
CPL (Laser marking type)	Excellent in mechanical properties/processability/loser-marking performance •Applicable to laser marking by using 1060nm-1070nm laser beam •Capable of matching color upon request
EM (Crosslinking agent)	Crosslinking agent developed for improving abrasion-resistance/heat-resistance/ chemical-resistance/compression set of thermoplastic polyurethane •Capable of constructing mesh structure in resin, after heat-treatment of resin moldings containing TPU •Capable of improving various characteristics

