

# For various molding (extrusion, injection, calendering, etc.)

## Applications

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, Fins, Goggles
	Others	Watch bands, Casters, Rollers, Heel top pieces of shoes
Extrusion molding	Hose/Tube	Pressure-resistant hoses, Tubes, Fire hose liners
	Belt	Conveyor belts, Air mattresses, Tarpaulins, Driving belts, Round belts
	Electrical wire/Cable	Electrical wire/Cable covering, Computer wiring, Curl cord
	Others	Ropes, Medical disposables
Calender molding		Conveyor belts, Films, Flexible containers

## Characteristics

TPU for molding, developed with our original technology

- The best abrasion resistance and the highest level of strength and elongation, compared with other elastomers based on polyester, polyolefin and polystyrene.
- Settable shore hardness covering a wide range of variation.
- Free from vulcanization process.
- High recoverability and recyclability of scraps.
- Well-balanced characteristics, such as cold resistance and oil resistance.
- Capable of coloring resins by using our CP series.
- We offer a range of highly functional grades, such as heat-resistant grades (PH) with a high softening point and silicone copolymer grades (PS).

## Representative Products

### ■ Standard grades

Product name	Polyol	Characteristic
P-1000	Ester	General-purpose grade
P-7000		Enhanced low temperature properties
P-2000	Ether	Hydrolysis resistance, Antibacterial activity
P-4000	Caprolactone	Excellent in injection moldability
P-800	Polycarbonate	Hydrolysis resistance, Antibacterial activity, Heat resistance

### ■ Highly functional grades

Product name	Characteristic
PH (Heat-resistant type)	<p><b>A grade that achieves higher heat resistance than conventional TPU</b></p> <ul style="list-style-type: none"> <li>•Less compression strain at high temperature, and a higher softening point</li> <li>•High resistance to heated oil/grease.</li> <li>•Wide application range due to minimal property changes across a wide temperature range.</li> </ul>
PS (Non-adhesive type)	<p><b>A grade that combines the characteristics of both silicone and TPU</b></p> <ul style="list-style-type: none"> <li>•Low adhesion and excellent releasability.</li> <li>•Wide application range due to minimal decrease in elastic modulus at high temperatures and minimal change in shore hardness at low temperatures.</li> </ul>