Mirakutoran® TPU P490

Thermoplastic Polyurethane Elastomer Alloy

Japan Mirakutoran Inc.

Message:

Our TPU "Mirakutoran ®" has the following outstanding features.
Has excellent wear resistance
Tensile strength, high mechanical strength and tear strength
Is a wide range of hardness
High impact strength
Oil resistance and good chemical resistance
Excellent low temperature properties, weather resistance, ozone resistance and is also good
Flexible rubber elastic, vibration-effective silencing
Compared to other urethane elastomer thermoplastic that is more
Playback can be processed
Vulcanization process without curing reaction, very high productivity
Resins and other polymer is easy
Solution is easily dissolved in solvent process
Mirakutoran to the standard type E and P are two types.
Type E has a certain cross-linked structure in the molecule, and excellent mechanical strength and compression set. P type is characterized by good liquidity linear structure

General Information	
Features	Shock absorption
	Impact resistance, good
	Good strength
	Good flexibility
	Good tear strength
	Ozone resistance
	Low temperature resistance
	Good chemical resistance
	Good wear resistance
	Good weather resistance
	Oil resistance

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.20	g/cm³	ASTM D792
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore A, 23°C, 2.00mm, injection molding)	88 - 92		ASTM D2240
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Taber Abrasion Resistance (23°C, 1000 Cycles, 1000 g, H-22 Wheel)	50.0	mg	ASTM D1044
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [1] (100% strain, 23°C, 2.00mm)	6.00	MPa	ASTM D412
Tensile Strength [2] (Yield, 23°C, 2.00 mm)	52.0	MPa	ASTM D412

Tensile Elongation [3] (Break, 23°C, 2.00 mm)	530	%	ASTM D412
Tear Strength [4] (23°C, 2.00 mm)	98.0	kN/m	ASTM D624
Compression Set (70°C, 22 hr)	42	%	ASTM D395
Rebound Resilience (23°C, 2.00 mm)	39	%	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Glass Transition Temperature	-44.0	°C	DSC
Vicat Softening Temperature	111	°C	ASTM D1525 [5]
Additional Information			
Test Methods: JIS K7311, K6262, K7206			
NOTE			
1.	300 mm/min		
2.	300 mm/min		
3.	300 mm/min		
4.	300 mm/min		
5.	压 力1 (10N)		

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China