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MIRACLL
Stock Code: 834779

MIRATHANE®

Thermoplastic Polyurethane Elastomer

Company Profile

Miracll Chemicals Co.,Ltd. (Code:834779) is the leading manufacturer of thermoplastic polyurethane elastomer(TPU) under the brand name of Mirathane®.

Mirathane® TPU products include polyester based TPU, polyether-based TPU, polycaprolactone-based TPU Polycarbonate-based TPU, Expanded TPU, Adhesive TPU and other functional TPU products with the comprehensive portfolio of products and excellent physical properties, Mirathane® TPU are widely used for film and sheet, hose and tube, electronics, shoes, wire and cable, automotive, conveyor belt, seal and gasket, wheel and caster, sport and recreation, agriculture, construstion, electronics as well as mining applications.

We are dedicated to providing creative solutions for every need of customers with our years of experience and creative spirit.Your demand is our direction.

MIRACLL

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E Series, Polyester-Based TPU

Features: Excellent Hydrolytic Resistance, Low Compression Set, Oil Resistance, Chemicals Resistance, Good Abrasion Resistance, High Resilience Performance.

Applications: Oil Tube, Seal & Gasket, Automotive Parts, Industry Hose, Bellows, Wire & Cable, Compounding & Modifier etc.

Properties		Standard	Unit	E70	E80	E85	E90	E95
Density		ASTM D792	g/cm³	1.19	1.19	1.19	1.19	1.20
Hardness		ASTM D2240	Shore A/D	72/-	82/-	86/-	92/-	95/-
Tensile Strength		ASTM D412	MPa	32	35	40	45	50
100% Modulus		ASTM D412	MPa	3	5	6	10	11
300% Modulus		ASTM D412	MPa	8	10	12	24	26
Elongation at Break		ASTM D412	%	650	550	500	450	400
Tear Strength		ASTM D624	kN/m	90	100	120	140	160
DIN Abrasion Loss		DIN 53516	mm³	35	30	30	30	30
Tg		DSC	℃	-43	-40	-37	-32	-30
Compression Set	22 hours@70℃ 24 hours@100℃	ASTM D395 ASTM D395	% %	23 43	25 45	30 46	30 46	32 47

Note:The above values are shown as typical values and should not be used as specifications.



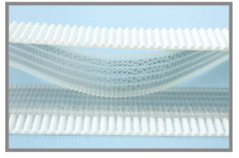

E1 Series, Polyester-Based TPU

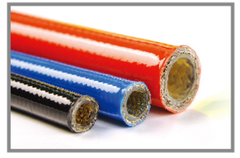
Features: Good Abrasion Resistance, Oil/Chemicals Resistance, Good Resilience Performance, High Pressure Resistance, Outstanding Mechanical Properties.

Applications: Belting, Hose & Tube, Seal & Gasket, Compounding, Wire & Cable, Automotive, Footwear, Caster, Film, Overmolding etc.

Properties		Standard	Unit	E180	E185	E190	E195	E155D	E165D	E175D
Density		ASTM D792	g/cm³	1.19	1.19	1.19	1.20	1.21	1.21	1.22
Hardness		ASTM D2240	Shore A/D	82/-	86/-	92/-	95/-	-/55	-/65	-/75
Tensile Strength		ASTM D412	MPa	35	40	45	50	52	55	60
100% Modulus		ASTM D412	MPa	5	7	10	15	16	22	35
300% Modulus		ASTM D412	MPa	12	15	24	35	38	40	43
Elongation at Break		ASTM D412	%	550	500	450	400	380	350	300
Tear Strength		ASTM D624	kN/m	100	120	140	160	180	200	240
DIN Abrasion Loss		DIN 53516	mm³	30	30	35	35	35	35	40
Tg		DSC	℃	-40	-37	-32	-30	-26	-22	-15
Compression Set	72 hours@23℃ 22 hours@70℃	ASTM D395 ASTM D395	% %	18 28	21 30	24 33	25 35	28 36	30 38	32 40

Note:The above values are shown as typical values and should not be used as specifications.



E1L Series, Polyester-Based TPU

Features: Excellent Processing Properties, Fast Setting Time, No Migration, Good UV Resistance，Excellent Flowing Properties.

Applications: Phone & Pad Cover, Belting, Hose & Tube, Wire & Cable, Footwear, Caster, Film, Coating, Over-molding etc.

Properties	Standard	Unit	E185L	E190L	E190LU	E195L	E195LU	E165DL	E175DL
Density	ASTM D792	g/cm³	1.19	1.19	1.19	1.20	1.20	1.21	1.22
Hardness	ASTM D2240	Shore A/D	86/-	92/-	92/-	95/-	95/-	-/65	-/75
Tensile Strength	ASTM D412	MPa	35	40	40	45	45	50	55
100% Modulus	ASTM D412	MPa	5	10	10	15	15	18	25
300% Modulus	ASTM D412	MPa	10	20	20	25	25	30	40
Elongation at Break	ASTM D412	%	600	550	500	500	500	450	400
Tear Strength	ASTM D624	kN/m	100	120	140	130	130	170	190
Tg	DSC	℃	-35	-30	-25	-25	-25	-20	-15

Note:The above values are shown as typical values and should not be used as specifications.




E2 Series, Polyester-Based TPU

Features: Excellent Abrasion Resistance, Slip Resistance, Favorable Hand Feeling, Low Temperature Flexibility.

Applications: Footwear, Compounding & Modifier, Overmolding, Tubes, Belt.

Properties	Standard	Unit	E255	E260	E265	E270	E275
Density	ASTM D792	g/cm³	1.18	1.18	1.18	1.19	1.19
Hardness	ASTM D2240	Shore A/D	57/-	63/-	67/-	73/-	77/-
Tensile Strength	ASTM D412	MPa	15	15	20	25	25
100% Modulus	ASTM D412	MPa	1	2	3	4	4
300% Modulus	ASTM D412	MPa	3	3	5	6	6
Elongation at Break	ASTM D412	%	750	750	700	650	600
Tear Strength	ASTM D624	kN/m	45	50	65	85	90
DIN Abrasion Loss	DIN 53516	mm³	70	100	40	50	100
Tg	DSC	℃	-45	-43	-42	-40	-38

Note:The above values are shown as typical values and should not be used as specifications.




E3 Series, Polyester-Based TPU

Features: Excellent Processing Properties, Fast Setting Time, No Migration, Excellent Transparency, Easy for Electroplating and Printing.

Applications: Phone & Pad Cover, Footwear, Compounding & Modifier, Wheel & Caster, Pneumatic Tube, Overmolding, Tapes, Tyre Chain etc.

Properties	Standard	Unit	E375	E380	E385	E390	E395	E355D	E365D	E375D
Density	ASTM D792	g/cm³	1.19	1.19	1.20	1.20	1.21	1.21	1.22	1.22
Hardness	ASTM D2240	Shore A/D	78/-	83/-	87/-	93/-	95/-	-/55	-/67	-/75
Tensile Strength	ASTM D412	MPa	30	35	37	40	43	40	45	50
100% Modulus	ASTM D412	MPa	4	5	6	10	13	15	22	26
300% Modulus	ASTM D412	MPa	8	9	10	13	22	23	25	28
Elongation at Break	ASTM D412	%	600	550	500	450	400	450	350	300
Tear Strength	ASTM D624	kN/m	100	110	115	160	180	190	220	240
Tg	DSC	℃	-30	-25	-25	-20	-15	-12	-8	-5

Note:The above values are shown as typical values and should not be used as specifications.



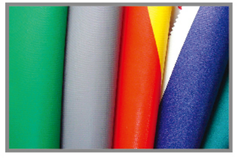
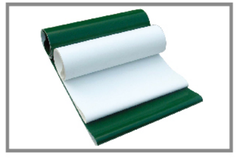

E5 Series, Polyester-Based TPU

Features: Wide Processing Windows, Good HF Welding Performance, Easy Cutting, Abrasion Resistance, Good Adhesive Properties.

Applications: Conveyor Belt, Cast/Flat-die Film, Compounding & Modifier etc.

Properties	Standard	Unit	E580	E585	E590
Density	ASTM D792	g/cm3	1.18	1.18	1.20
Hardness	ASTM D2240	Shore A/D	80/-	85/-	90/-
Tensile Strength	ASTM D412	MPa	13	20	25
100% Modulus	ASTM D412	MPa	3	4	6
300% Modulus	ASTM D412	MPa	5	7	10
Elongation at Break	ASTM D412	%	600	700	500
Tear Strength	ASTM D624	kN/m	60	70	100

Note:The above values are shown as typical values and should not be used as specifications.


E6 Series, Polyester-Based TPU

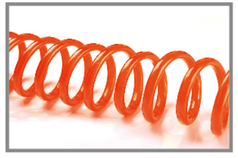
Features: Excellent Transparency, Less Fisheye, Migration Resistance, UV Resistance.

Applications: Hose & Tube, Air Cushion, Film, High-Transparent Articles etc.

Properties	Standard	Unit	E685	E690	E695	E655D	E665D
Density	ASTM D792	g/cm³	1.18	1.19	1.20	1.20	1.20
Hardness	ASTM D2240	Shore A/D	86/-	91/-	94/-	-/55	-/65
Tensile Strength	ASTM D412	MPa	35	40	45	48	50
100% Modulus	ASTM D412	MPa	5	10	10	17	22
300% Modulus	ASTM D412	MPa	15	25	30	37	45
Elongation at Break	ASTM D412	%	520	460	450	400	400
Tear Strength	ASTM D624	kN/m	110	150	170	190	200
Tg	DSC	℃	-28	-20	-15	-12	-8

Note:The above values are shown as typical values and should not be used as specifications.



M Series, Polyether-Based TPU

Features: Excellent Hydrolytic Resistance, Low Temperature Flexibility, Fungus Resistance, Aging Resistance, Weathering Resistance.

Applications: Lay-flat Hose, Fire Hose, Tubes, Flexitank, Fabric Coating, Wire & Cable Jacket, Film & Sheet, Ear Tag, Smart Watch Band etc.

Properties	Standard	Unit	M70	M75	M80	M85	M88	M90	M95	M55D	M65D
Density	ASTM D792	g/cm³	1.10	1.10	1.10	1.11	1.11	1.12	1.14	1.16	1.17
Hardness	ASTM D2240	Shore A/D	70/-	75/-	80/-	86/-	88/-	92/-	95/-	-/55	-/65
Tensile Strength	ASTM D412	MPa	20	23	28	32	36	39	40	42	42
100% Modulus	ASTM D412	MPa	5	5	6	7	8	9	13	18	22
300% Modulus	ASTM D412	MPa	9	9	10	12	15	16	26	27	30
Elongation at Break	ASTM D412	%	700	680	650	600	550	500	480	400	350
Tear Strength	ASTM D624	kN/m	75	80	85	95	100	110	130	150	180
Tg	DSC	℃	-60	-55	-46	-45	-40	-36	-34	-30	-25

Note:The above values are shown as typical values and should not be used as specifications.




M1 Series, HMVT TPU

Features: High Moisture Vapor Transmission, Less Fisheye, Good Handfeeling.

Applications: High Moisture Vapor Transmission Film.

Properties	Standard	Unit	M180	M190
Density	ASTM D792	g/cm³	1.2	1.21
Hardness	ASTM D2240	Shore A	79	89
Tensile Strength	ASTM D412	MPa	24	30
Elongation at Break	ASTM D412	%	800	600
Tear strength	ASTM D624	KN/m	75	90
Tg	DSC	℃	-36	-18
MVT	ASTM E96BW 2000	g/(m².24h)	>10000	>8000

Note:The above values are shown as typical values and should not be used as specifications.




L Series, Polycaprolactone-Based TPU

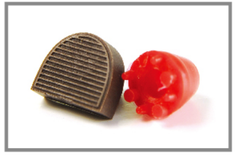
Features: Excellent Hydrolytic Resistance, Oil Resistance, Good Abrasion Resistance, Resilience Performance, Low Temperature Flexibility.

Applications: Oil Seal, Footwear, Belting, Hose & Tube, Wire & Cable, Wheel & Caster etc.

Properties		Standard	Unit	L80	L85	L90	L95	L55D	L65D	L75D
Density		ASTM D792	g/cm³	1.19	1.19	1.19	1.20	1.21	1.21	1.22
Hardness		ASTM D2240	Shore A/D	82/-	86/-	92/-	95/-	-/55	-/65	-/75
Tensile Strength		ASTM D412	MPa	38	40	45	50	52	55	60
100% Modulus		ASTM D412	MPa	5	8	12	17	18	24	34
300% Modulus		ASTM D412	MPa	10	16	27	32	38	42	45
Elongation at Break		ASTM D412	%	550	500	450	400	380	350	300
Tear Strength		ASTM D624	kN/m	110	130	150	170	180	210	220
DIN Abrasion Loss		DIN 53516	mm³	25	25	30	30	30	30	35
Tg		DSC	℃	-42	-40	-38	-37	-36	-34	-30
Compression Set	22 hours@70℃ 24 hours@100℃	ASTM D395 ASTM D395	% %	27 40	28 40	27 41	30 42	33 43	35 45	37 47

Note:The above values are shown as typical values and should not be used as specifications.





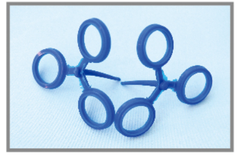

S Series, High Temperature Resistant TPU

Features: Excellent Hydrolytic/Oil Resistance, High and Low Temperature Resistance, Outstanding Low Compression Set.

Applications: Hydraulic Seal, Wheel & Castor, Industrial Tubes and etc.

Properties		Standard	Unit	S90	S95	S55D
Density		ASTM D792	g/cm³	1.19	1.20	1.20
Hardness		ASTM D2240	Shore A/D	92/-	95/-	-/55
Tensile Strength		ASTM D412	MPa	30	35	37
100% Modulus		ASTM D412	MPa	12	18	20
300% Modulus		ASTM D412	MPa	20	30	30
Elongation at Break		ASTM D412	%	400	350	330
Tear Strength		ASTM D624	kN/m	120	140	160
DIN Abrasion Loss		DIN 53516	mm³	30	30	35
Tg		DSC	℃	-42	-40	-40
Compression Set	22 hours@70℃ 24 hours@100℃	ASTM D395 ASTM D395	% %	16 24	18 25	18 25

Note:The above values are shown as typical values and should not be used as specifications.




C Series, Polycarbonate-Based TPU

Features: Excellent Aging Resistance, Oil Resistance, Hydrolysis Resistance, High Temperature Resistance, UV Resistance, Excellent Physical Properties & Weathering Resistance etc.

Applications: Hose & Tube, Film & Sheet, Fire Hose, Oil Tank.

Properties	Standard	Unit	C80	C85	C90	C95
Density	ASTM D792	g/cm³	1.2	1.2	1.2	1.2
Hardness	ASTM D2240	Shore A/D	82/-	86/-	92/-	96/-
Tensile Strength	ASTM D412	MPa	38	40	45	50
100% Modulus	ASTM D412	MPa	7	7	8	10
300% Modulus	ASTM D412	MPa	14	16	18	19
Elongation at Break	ASTM D412	%	500	450	400	350
Tear Strength	ASTM D624	kN/m	90	100	120	130
DIN Abrasion Loss	DIN 53516	mm³	25	25	25	25
Tg	DSC	℃	-30	-25	-20	-18

Note:The above values are shown as typical values and should not be used as specifications.




G Series, Bio-Based TPU

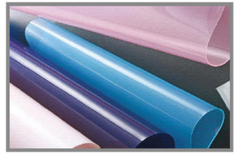
Features: Bio-Based(plant-based, 25%-70% according to ASTM-D6866), Environment-friendly, Excellent Elasticity and Transparency.

Applications: Footwear, Electronic, Automatic, Sports & Recreation, Over-molding, Compounding & Modifier, Film and etc.

Properties	Standard	Unit	G365	G375	G385
Density	ASTM D792	g/cm³	1.2	1.2	1.2
Hardness	ASTM D2240	Shore A/D	67/-	77/-	85/-
Tensile Strength	ASTM D412	MPa	20	25	35
100% Modulus	ASTM D412	MPa	2	3	5
300% Modulus	ASTM D412	MPa	4	6	10
Elongation at Break	ASTM D412	%	700	650	600
Tear Strength	ASTM D624	kN/m	65	75	90
Tg	DSC	℃	-43	-40	-28

Note:The above values are shown as typical values and should not be used as specifications.





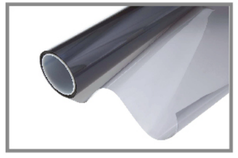

A Series, Aliphatic TPU

Features: Non-Yellowing, Excellent Transparency, Migration Resistance, Less Fisheye.

Applications: PPF For Automotive, Automotive Interior Decoration, Watchband, Hose & Tube, Wire & Cable, Optical Glasses.

Properties	Standard	Unit	A885	A890	A895	A185	A190	A195	A285	A290	A295
Density	ASTM D792	g/cm³	1.07	1.07	1.08	1.14	1.14	1.14	1.13	1.13	1.13
Hardness	ASTM D2240	Shore A/D	85/-	91/-	95/-	85/-	91/-	96/-	83/-	88/-	93/-
Tensile Strength	ASTM D412	MPa	30	35	40	35	40	45	35	40	43
100% Modulus	ASTM D412	MPa	5	6	10	7	8	9	7	8	10
300% Modulus	ASTM D412	MPa	10	11	16	15	15	17	15	20	25
Elongation at Break	ASTM D412	%	550	500	450	550	500	450	480	400	380
Tear Strength	ASTM D624	kN/m	77	85	80	90	95	110	95	110	120
Tg	DSC	℃	-65	-58	-50	-40	-38	-35	-38	-35	-30

Note:The above values are shown as typical values and should not be used as specifications.




H Series, Hotmelt Adhesive TPU

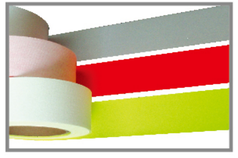
Features: Excellent Elasticity, High Bonding & Peeling Strength, Outstanding Recovery Properties.

Applications: Hot-melt Film and Tape, Fabric Coating, Toe Puffs & Counters etc.

Properties	Standard	Unit	H290	H290H	H570	H680	H690	H220E
Density	ASTM D792	g/cm³	1.2	1.2	1.2	1.2	1.2	1.2
Hardness	ASTM D2240	Shore A	97	97	75	80	90	95
Tensile Strength	ASTM D412	MPa	25	30	15	20	32	35
Elongation at Break	ASTM D412	%	700	700	600	500	450	600
Tfb	-	℃	60	60	105	120	135	85
R&B Softening Point	ASTM D6493	℃	80	90	125	140	-	-
Tack-free time	-	min	4	4	8	6	2	10

Note:The above values are shown as typical values and should not be used as specifications.



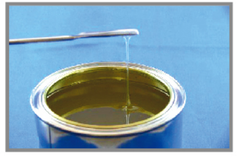
H Series, Hotmelt/Solvent Adhesive TPU

Features: Good Solvent Solubility, Fast Crystallization, Excellent Green Bonding Strength and Final Holding Strength.

Applications: Fabric Coating, Fire Hose Adhesive, Hot-melt Adhesive Films & Tapes, Solvent Adhesives etc.

Properties	Standard	Unit	H206	H212	H220	H230	H306	H310	H320	H330
Density	ASTM D792	g/cm³	1.2	1.2	1.2	1.2	1.16	1.16	1.16	1.16
Hardness	ASTM D2240	Shore A	95	95	95	95	95	95	95	95
Tensile Strength	ASTM D412	MPa	35	38	40	40	30	30	30	30
Elongation at Break	ASTM D412	%	600	600	600	600	600	600	600	600
Tfb	-	℃	85	85	90	90	90	95	100	100
Viscosity(15% in MEK,25℃)	ISO 3219	mPa.s	300~800	800~1500	1500~2200	2200~3600	200~800	800~1500	1500~2500	2500~3600
Tack-free time	-	min	10	12	15	15	5	5	5	5
Minimum Activation temperature	-	℃	55~65	55~65	55~65	55~65	60~70	60~70	60~70	60~70

Note:The above values are shown as typical values and should not be used as specifications.

Halogen-Free Flame Retardant TPU

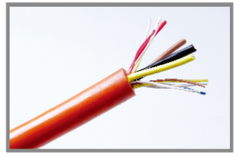
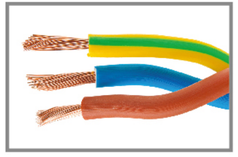
Features: Ether/Ester, Halogen-free Flame Retardant, Matte Effect, Excellent Hydrolytic Resistance, Low Temperature Flexibility, Abrasion Resistance, Low Smoke & Toxicity, Good Thermal and Oil Aging Performance.

Applications: Wire & Cable, Film & Sheet, Hose & Tube, Electronics, Automotive Parts etc.

Properties	Standard	Unit	E180F	E185F	E190F	E195F	M85F	M90F	E185Z	M85Z	M85W	E185W	E190W
Density	ASTM D792	g/cm³	1.20	1.20	1.20	1.20	1.15	1.15	1.20	1.16	1.13	1.20	1.20
Hardness	ASTM D2240	Shore A	82	87	93	95	85	90	87	88	85	87	92
Tensile Strength	ASTM D412	MPa	25	26	28	30	20	20	25	15	24	30	35
100% Modulus	ASTM D412	MPa	6	7	9	12	5	6	4	6	9	6	8
300% Modulus	ASTM D412	MPa	8	11	12	16	9	12	9	11	14	10	12
Elongation at Break	ASTM D412	%	700	650	600	550	500	400	500	400	520	500	450
Tear Strength	ASTM D624	kN/m	90	95	100	120	80	85	80	75	95	100	132
Tg	DSC	℃	-35	-33	-30	-25	-45	-36	-35	-40	-45	-35	-30
FR Property	UL 94	-	V-0	V-0	V-0	V-0	V-2	V-0	V-0	V-0	--	--	--
Appearance	-	-	white	white	white	white	transparent	white	matt	matt	matt	matt	matt

Note:The above values are shown as typical values and should not be used as specifications.



F1 Series, TPOU Elastomer

Features: Low Density, Good Rebounding, UV Resistance, Moulding Foaming.

Applications: Footwear, Buffer Gasket, Automotive Interior Materials, Bicycle Part etc.

Properties	Standard	Unit	F120
Density	ASTM D792	g/cm³	0.245
Hardness	--	Asker C	42
Rebounding	ISO 8307	%	55
Compression Set(50%6h,50℃)	--	%	18
UV Resistance	ASTM D1148	Grade	4-4.5

Note:The above values are shown as typical values and should not be used as specifications.




F6 Series, Expanded TPU (ETPU)

Features: Low Density, Good Rebounding, Slip Resistance, Chemical Resistance, EnvironmentallyFriendly, UV Resistance, Steam Moulding & Adhesive Processing.

Applications: Sport Shoe Sole, Vibration Decoupling, Caster, Packaging and Dunnage Trays in the Logistics, Automotive Interior Materials etc.

Properties	Standard	Unit	F620	F815
Density	ASTM D792	g/cm³	0.23	0.2
Hardness	-	Asker C	43	50
Tensile Strength	ASTM D412-15a	MPa	1.3	1.3
Elongation at Break	ASTM D412-15a	%	170	170
Tear Strength	ASTM D624-00	kN/m	15	15
Rebounding	ISO 8307	%	58	58
Compression set(50% 6h, 45℃)	-	%	15	10
Yellowing Resistance(24h)	ASTM D1148	Grade	4-4.5	4.5

Note:The above values are shown as typical values and should not be used as specifications.




I Series, Engineering TPU(U-Plast)

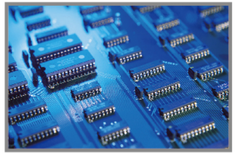
Features: Excellent High Temperature Resistance, Good Oil/Chemical Resistance, Good Transparency, Outstanding Mechanical Properties.

Applications: Oil-water Separator, Plastic Screw, Syringe Needle, Electronic Parts etc.

Properties	Standard	Unit	I80D	I85D
Density	ASTM D792	g/cm³	1.20	1.20
Hardness	ASTM D2240	Shore A/D	-/80	-/85
Tensile Strength	ASTM D412	MPa	70	95
Elongation at Break	ASTM D412	%	150	25
Tear Strength	ASTM D624	kN/m	200	220
Tg	DSC	℃	90	130
Flexural strength	ASTM D790	MPa	115	120
Flexural Modulus	ASTM D790	MPa	2150	2200
Impact Strength	ASTM D256	J/m	120	105
HDT, 0.45MPa	ASTM D648	℃	83	123
HDT, 1.82MPa	ASTM D648	℃	81	120
Vicat Softening Temperatunre	ASTM D1525	℃	75	123

Note:The above values are shown as typical values and should not be used as specifications.



V Series, TPSiU Elastomers

Features: Silky Hand Feeling, Solvent/Chemical Resistance, Low Migration, Good Weathering Resistance Good Coloring Performance, Anti-Dust, Easy Cleaning, Fast Setting Time, Easy Demolding and etc.

Applications: Injection Molding For Electronic Devices, Watchband, Cable, Film, Overmolding, Compounding.

Properties	Standard	Unit	V165	V170	V175	V180	V185	V670
Density	ASTM D792	g/cm3	1.06	1.08	1.10	1.12	1.12	1.08
Hardness	ASTM D2240	Shore A	63	70	73	82	86	68
Tensile Strength	ASTM D412	MPa	9	13	15	18	20	15
100% Modulus	ASTM D412	MPa	2.5	3	3	6	5	3
300% Modulus	ASTM D412	MPa	4	5	5	10	8	5
Elongation at Break	ASTM D412	%	950	900	900	800	700	950
Tear Strength	ASTM D624	KN/m	35	47	65	70	75	45
Tg	DSC	℃	−60	-58	−55	−53	−50	-60

Note:The above values are shown as typical values and should not be used as specifications.



STORAGE

Prolonged contact with water can lead to hydrolysis of certain types of TPU resins because of the high moisture absorbing property.For this reason,they must be stored in tightly closed containers in a dry,cool and shady area.Never bring packages full of TPU into contact of water,nor put them at humid locations.Never put opened packages in open air for prolonged periods of time During molding and processing,moisture in TPU resins will lead to degradation and defective finished products, so it is recommended to remove moisture to make its content below 0.03% prior to processing.

DISCLAIMER

The information provided here is for reference only.The specification will be provided in the quality certificate or in the contract.It is the user`s responsibility to test the material and its suitability for a process. We have no control over what another dose with the material and we cannot take any responsibility for another party`s action.Nor will we be responsible for any indirect damages while using our products.The user is welcome to contact our customer and technical service center with questions on our products.

ENVIRONMENT

According to environmental laws and regulations,TPU are common non-controlled wastes which means they can be buried or combustded under permission.Classification and recovery of TPU packages made of paper and plastics after use is recommended to avoid wastes of resources and environmental pollution.

SAFETY

Take MSDS as reference for storage,transportation and processing.




MIRATHANE® FDA

MIRATHANE® ROHS

MIRATHANE® REACH

MIRATHANE® UL