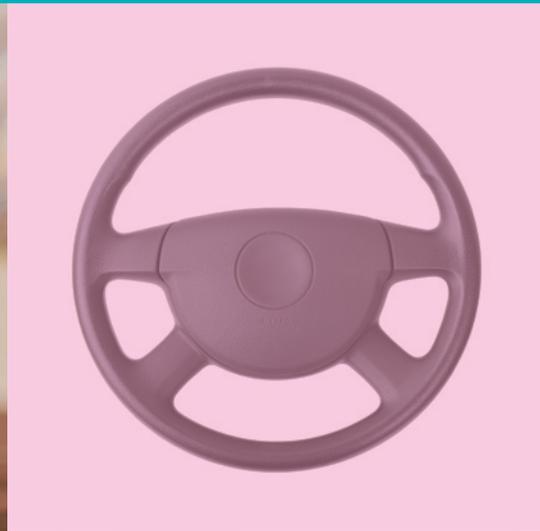


TPE SPECIALIST & SOLUTION PROVIDER



TSRC CORPORATION



TSRC CORPORATION

T BLEND

TSRC Corporation, formerly known as Taiwan Synthetic Rubber Corp., was established in 1973. Since its inception, TSRC has vigorously expanded its business by establishing production bases and commercial teams in China (Nantong in Jiangsu, Song-Jiang in Shanghai); Rayong, Thailand; Panipat, India; and Plaquemine, U.S.A, to service growing demand from customers worldwide. It has since grown to become one of the largest elastomer companies in the world. Today, TSRC is much more than a synthetic rubber company. It is a specialty polymer company that services customers in the tire, automotive, industrial, consumer, footwear and medical product markets.

In its constant effort to deliver value to customers, TSRC leverages its four major competitive advantages: Stable Quality and Superior Service, Eco-responsible Manufacturing, Proven Supply Chain Reliability, and Technological Innovation. At the same time, TSRC continues to expand its portfolio with specialty products, thereby transforming itself from a mere material supplier into a full-service solution leader in the chemical industry.

TSRC is a leading global producer in styrenic block copolymer (SBCs) segments. It delivers enhanced durability and functionality in its expansive portfolio of SBC and TPE compounds, including TAIPOL[®] and VECTOR[®] SBS and SIS products, as well as SEBS, hydrogenated SBS and downstream products, and T-BLEND[®] Applied Materials. TSRC continues to broaden its sales network throughout Asia, Europe, and the Americas, where it can provide customers with consistent and reliable solutions, as well as responsive customer and technical services.

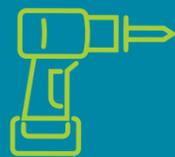


T-BLEND® TPE COMPOUNDS

Customized Formulation
with Modifiable Physical Properties

T-BLEND Applied Materials utilizes thermoplastic elastomer and other applied materials, which are melted via the mixer after being prepared in accordance with a certain proportion.

Our product is a range of compounded materials based on SEBS that designed for application from soft touch grips to light weight shoes, elastic hygiene to medicals and new applications with specific function added.



SOFT TOUCH AND GELS

T-BLEND gel compounds provide a wide range of hardnesses, from shore to shore A 80; standard grades are available; and it can be customized for specific requirements.



OVERMOLDING

T-BLEND TPE compounds can be overmolded on handles to enhance grip. Overmolding types include 2K or multi-shot injection, which exhibit excellent adhesion to a variety of substrates, such as PC, ABS, and nylon etc. They can also be formulated for food contact applications.



ADVANCED SHOE MATERIAL (ASM) AND FOAM

T-BLEND foaming compounds are suitable for shoe applications which require lightweight and high resilience with compression proof and slip-resistant foaming material. The ASM series is available for standard grades and can be customized for specific colors and requirements.

ADVANCED SHOE MATERIAL & FOAM MATERIAL

KEY PROPERTIES OF SEBS FOAM

PERFORMANCE

- Exceptional plasticity
- High strength and toughness
- Good touch
- Improved compression set
- High flexibility
- Low shrinkage
- Good weather resistance
- Good matte surface
- High slip resistance
- Resistance to low temperatures

ADVANTAGES

- The compression and anti-slip properties of SEBS foam are superior to those of EVA foam board
- Its physical properties are similar to traditional rubber
- Chloroprene Rubber (CR), Ethylene Propylene Diene Rubber (EPDM), and Styrene Butadiene Rubber (SBR)
- Simple manufacturing process, odorless rubber, and easy color mixing
- Widely used as modifier for rubber/plastic foam products

ADVANCED SHOE MATERIAL (ASM)

T-BLEND ASM series is a premier SEBS compound formulated specifically for footwear that allows processing by compression molding and injection molding.

Our materials offer superior rebound with high impact absorption that can effectively absorb imposed force, giving the wearer a pleasant and comfortable walking and wearing experience.

Main applications include running shoes, walking shoes, cross fit training shoes, and basketball shoes.



Soft Touch



Lightweight



Low Compression Set



Anti-slip & Wear-resistant



Abrasion Resistance



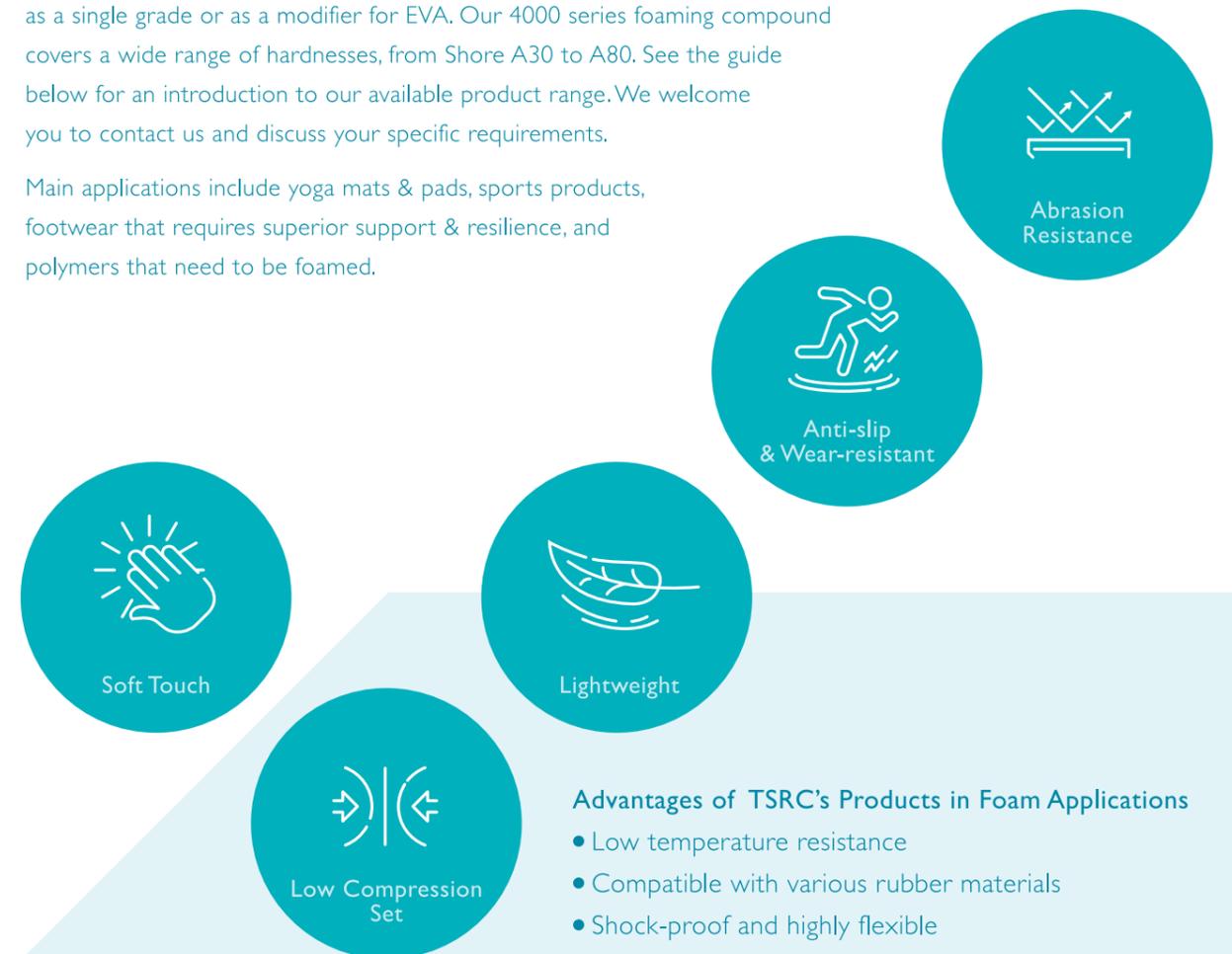
FOAM FEATURES FOR SHOE SOLES

	Advantages	Potential Applications
LIGHT-WEIGHT FOAM	Density < 0.18 • Light-weight • Flexible hand feel	Packaging goods, toy foam wheels, foam absorption layer
HIGH RB FOAM	Rebound > 60% • To save energy & ease tiredness • Outstanding rebound & stable sustaining effect	Slippers, midsoles, mats, supports for sports & medical use, ear muffs (3C)
ANTI-SLIP FOAM	Anti-slip (dry) > 0.6; (wet) > 0.4 • A 10% increase in grip compared to typical EVA • Dry & wet non-slip performance	Outsoles, slippers
DAMPING FOAM	Rebound < 20% • Shock absorption • High impact absorption	Insoles, protective gears, flooring mats, memory pillows, impact protection gear, damping pads
BIO-FEED FOAM	10~45% of the content is bio-based • Better rebound, higher durability	Midsoles

FOAM MATERIALS

T-BLEND prime foaming product is designed for foam applications that require a better-than-normal combination of elasticity and slip resistance. It can be processed as a single grade or as a modifier for EVA. Our 4000 series foaming compound covers a wide range of hardnesses, from Shore A30 to A80. See the guide below for an introduction to our available product range. We welcome you to contact us and discuss your specific requirements.

Main applications include yoga mats & pads, sports products, footwear that requires superior support & resilience, and polymers that need to be foamed.



Advantages of TSRC's Products in Foam Applications

- Low temperature resistance
- Compatible with various rubber materials
- Shock-proof and highly flexible
- Anti-slipper and wear resistance
- Easiness to process to reduce the production cost
- Toxicity and odor free
- Recyclable

SEBS foaming material has high elongation toleration, firmness, superior compression-proof deformation, soft touch, excellent resistance to low temperatures, and anti-slip performance.

With its excellent flexibility and rebound, SEBS foaming rubber material has better performance than EVA and is similar to PU and CR foaming in its tactile feel.

SEBS foaming is highly compatible with raw materials such as EPDM, EVA, and SBR, and its simplified formula and manufacturing process provide it with more competition advantages.

SEBS & OTHER MATERIALS IN FOAM APPLICATION

	PU Foam	EVA Foam	T-BLEND Foam
Specific Gravity	○	◎	◎
Hardness	○	○	◎
Tensile Strength	◎	○	○
Elongation	○	○	◎
Tear Strength	◎	○	○
Compression Set	◎	×	◎
Shrinkage	◎	△	○
Rebound	○	△	◎
Anti-slip	◎	×	◎
Weather Resistance	×	○	◎

◎ Superb ○ Good △ Moderate × Poor



ADVANCED SHOE MATERIAL POLYMER GRADE

Grade	Application	Process	Type	Expansion Ratio (%)	Compression Ratio (%)	Hardness (Asker C)	Specific Gravity	Tensile (kg/cm ²)	Elongation (%)	Tear (kg/em)	Split Tear (kg/em)	Compression Set (%)	Rebound (%)	Shrinkage (%)	Energy Return (%)
CXI-001	Midssole	CCF	IP	1.68	/	45	0.163	31	328	13.1	2.31	42	58	0.5	58
CXI-002	Midssole	CCF	IP	1.6	/	43	0.185	32	360	12	2.5	48	58	1	60
CXI-003	High Rebound	CCF	IP	1.65	/	35	0.165	28	363	10.1	2.05	49	65	0.91	67
CXI-004	High Rebound	CCF	IP	1.57	/	45	0.197	30	312	12	2.02	39	61	1.68	63
CXR-003	Midssole/High Rebound	CCF	CMP	1.9	1.5	40-46	0.13-0.17	26	250	12	2.2	51	67	2	69
CXS-001	Midssole	CCF	CMP	1.8	1.5	50	0.19	25	300	10	2.5	30	50	1.5	56
CXW-001	Midssole	CCF	CMP	2	1.5	43	0.12	23	300	9	2	55	54	1	59
SNR-004-I	Sandal	SCF	IP	/	/	34	0.17	15	338	13	1.05	98	50	/	45
SNS-002-I	Midssole	SCF	IP	/	/	52	0.19	15	300	12	1.38	29	64	/	59
SNW-004	Sandal	SCF	IP	/	/	28	0.22	15	359	10	1	98	65	/	64

*CMP: Compression molding process *IP: Injection molding process

PRIME FOAMING GRADE

Grade	Application	Color	Hardness (Shore A)	Specific Gravity	Tensile Strength (kgf/cm ²)	300% Modulus (kg/cm ²)	Elongation (%)	Melt Flow Rate (g/10min) 5kg at 180°C	Tear Strength (kg/cm)
		Test Method	ASTM D792	ASTM D2240	ASTM D2242	ASTM D412	ASTM D412	ASTM D1238	ASTM D624
2800-60N	High Rebound	Natural	60-66	0.88-0.92	95	55	490	5-15 (230°C, 5kg)	33
4000-40N	Modifier	Natural	40-46	1.03-1.07	25	30	450	2-10	18
4000-40T	Modifier	Natural	37-43	0.86-0.91	28	/	500	5-15 (190°C, 2.16kg)	17
4000-85N	High Rebound	Natural	78-84	0.89-0.93	/	/	/	1-5 (190°C, 2.16kg)	/
4001-45N	Modifier	Natural	44-50	1.07-1.11	29	23	490	40-80	19
4002-55N	Modifier	Natural	49-55	0.87-0.91	46	22	750	9-25	20
4003-45N	Modifier	Natural	42-48	1.04-1.08	28	24	470	2-10	20
4004-85T	Modifier	Translucent	83-89	0.86-0.9	100	74	450	0-5	60
4007-55N	Modifier	Natural	50-56	0.95-0.99	23	18	670	2-8	15
4011-55N	Insole/High Rebound	Natural	58-62	0.92-0.96	42	37	340	0.5-5	37
4012-55N	Insole/High Rebound	Natural	48-52	0.99-1.03	28	22	450	1-5	25
4013-60N	Modifier	Natural	49-55	0.92-0.96	30	17	900	0-8	19
4014-55N	Modifier	Natural	49-55	0.89-0.93	50	20	800	9-25	20
4022-80N	High Rebound	Natural	78-84	0.89-0.93	/	/	/	0.5-4 (190°C, 2.16kg)	/

INJECTION GRADE

Grade	Application	Color	Hardness (Shore A)	Specific Gravity	Tensile Strength (kgf/cm ²)	300% Modulus (kg/cm ²)	Elongation (%)	Melt Flow Rate (g/10min) 5kg at 180°C	Tear Strength (kg/cm)
		Test Method	ASTM D792	ASTM D2240	ASTM D2242	ASTM D412	ASTM D412	ASTM D1238	ASTM D624
PA-17005	Outsole	Transparent	62-68	0.93-0.96	90-120	/	400-600	0-5	40-50
PC-18019	Outsole	Natural	67	0.917	62	/	550	1-8 (190°C, 2.16kg)	50
PC-21001	Injection Parts	Natural	80	0.891	130	/	250	5.8 (230°C, 2.16kg)	120
PC-21002	Injection Parts	Natural	92	0.895	160	245	360	6.6 (230°C, 2.16kg)	160

SOFT TOUCH & GELS

This is a series of TPE materials designed for applications in shoes and sporting goods. The hardness range covers extremely soft Shore OO to Shore A 80, and thus can meet a wide range of application requirements, such as gel insoles, shoe outsoles, and sporting accessories/parts.

In the product table, we have provided an overview of the typical properties for some of the compounds. See the guide below for an introduction to our available product range. We welcome you to contact us and discuss your specific requirements.

Main applications include shoe-pads, insoles, outsoles, and accessories.



Shock-proof & Anti-slip



Good Weather Resistance



Superior Color Match

Products Undergo UV and Ozone Aging Testing



Soft Touch

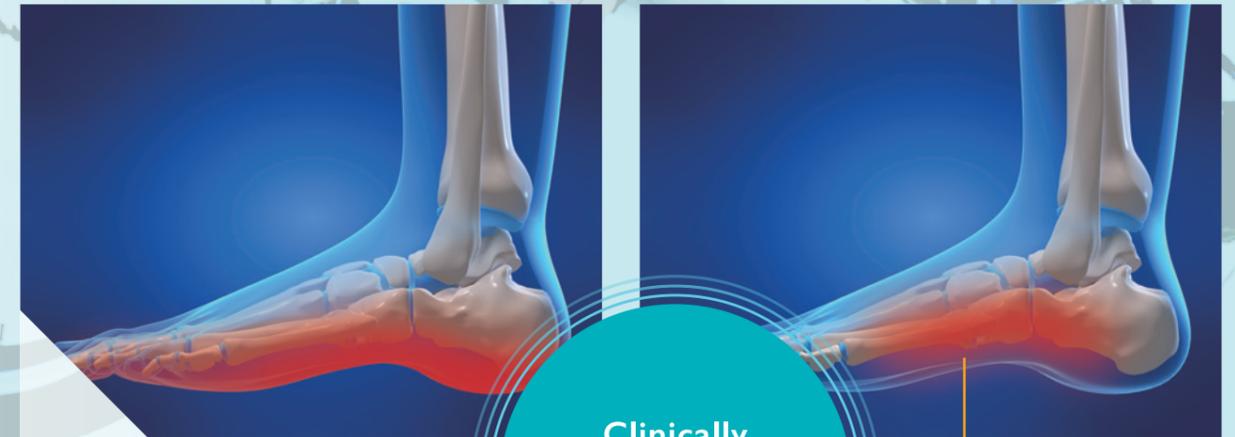


A Wide Range of Hardnesses Available

Shore A To D

TIRED ACHY FEET

ACHY PAIN RELIEF



Clinically Proven to Relieve Arch Pain



Ultra-soft Gel Provides Pain-release Property



9mm Depth Design Fits The Heel Comfort to Absorb Shock

Designed for Arch Pain Relief, Low Compression Set Provides Quick Foam Recovery

PRIME SOFT TOUCH & GEL GRADE

Grade	Application	Color	Hardness (Shore A)	Specific Gravity	Tensile Strength (kgf/cm ²)	300% Modulus (kg/cm ²)	Elongation (%)	Melt Flow Rate (g/10min) 5kg at 180°C	Tear Strength (kg/cm)
		Test Method	ASTM D2240	ASTM D792	ASTM D412	ASTM D412	ASTM D412	ASTM D1238	ASTM D624
I000-50T	Soft Gel	Translucent	47-53	0.91-0.95	55	25	1030	25-45 (180°C, 2.16kg)	27
I001-45C	General	Natural	42-48	0.89-0.95	60	29	940	10-30 (180°C, 2.16kg)	30
I003-35C	General	Translucent	30-36	0.89-0.93	35	20	700	40-80 (180°C, 2.16kg)	22
I100-80N	General	Natural	77-83	0.97-1.01	50	35	500	10-30 (180°C, 2.16kg)	30
I500-70N	General	Natural	67-73	0.9-0.94	35	20	700	5-15 (90°C, 2.16kg)	25
I903-45N	General	Natural	44-50	0.99-1.05	26	22	465	30-105	15
2002-10S	General	Blue	52-58 (Type 00)	0.84-0.90	12	3	800	35-75 (160°C, 2.16kg)	3
2003-10S	General	Blue	52-58 (Type 00)	0.85-0.91	15	4	740	35-85 (160°C, 2.16kg)	4
2102-10T	General	Translucent	17-23 (Type A0)	0.85-0.89	7	1	700	5-15 (120°C, 1.2kg)	3
2102-60B	General	Black	57-63	0.99-1.03	30	25	400	60-120 (180°C, 5kg)	16
2102-70N	General	Natural	67-73	0.98-1.02	50	30	500	40-100 (180°C, 5kg)	25
2108-65T	General	Translucent	64-70	0.87-0.91	70	30	700	30-90 (180°C, 5kg)	25
2125-50N	General	Natural	47-53	1.02-1.06	20	15	400	8-16 (190°C, 2.16kg)	15
3001-45N	General	Natural	42-48	0.89-0.93	20	15	350	10-30 (180°C, 5kg)	10
3001-75N	General	Natural	72-78	0.89-0.93	50	40	400	15-45 (180°C, 5kg)	20
5792B-PE	General/ Gasket	Black	55-59	0.87~0.91	55~61	50	20	600	40~80
9094N-DV	General/ Durable	Natural	87-93	0.93-0.97	70	60	400	40-80 (180°C, 5kg)	50

OVERMOLDING

Our overmolding materials bond excellently with PP, PE, PA, PC, ABS, PS and their blends, provide soft-touch qualities that make the end products comfortable, safe, resilient, durable, and visually appealing. It makes new designs possible and creates a competitive edge for the product in the form of ergonomic, fatigue-resistant, and repetitive motion-resistant grips for tools that carry vibration & impact during use. As materials are bonded together at the injection molding stage, no adhesive is needed prior to processing.

Main applications include hand and power-tool grips, bicycle grips (especially trail and off-road sport bicycles), high-value consumer goods that need unique ergonomics as well as safety & durability, writing instruments like pens and pointers for touch pad pens, accessories and automotive parts where durable, resilient, soft touch properties are required.

SEBS-BASED COMPOUNDS

OVERMOLDING

A soft, elastic layer moulded onto a hard, rigid plastic (engineering) surface to provide a 'soft touch'

PROCESSES

- Two-stage injection moulding
- Co-moulding

GOOD ADHESION REQUIRES

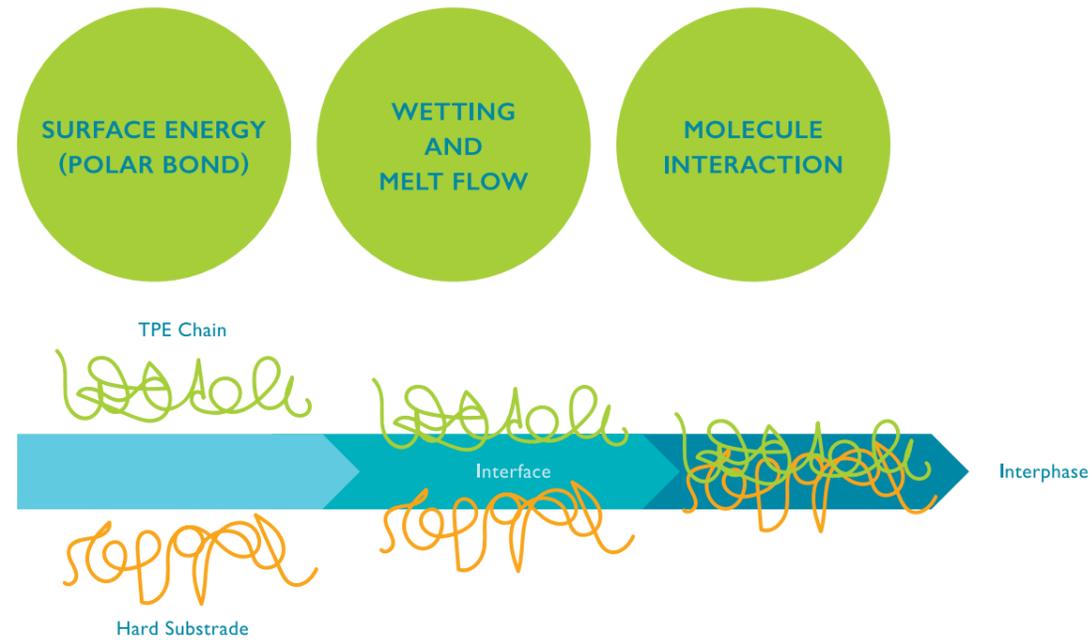
- Compatibility at the interface of materials
- Good interface wetting by
 1. Good flow (use of tackifier resins like rosin esters)
 2. Optimisation of moulding conditions (gate, temperature)
- Low residual stress



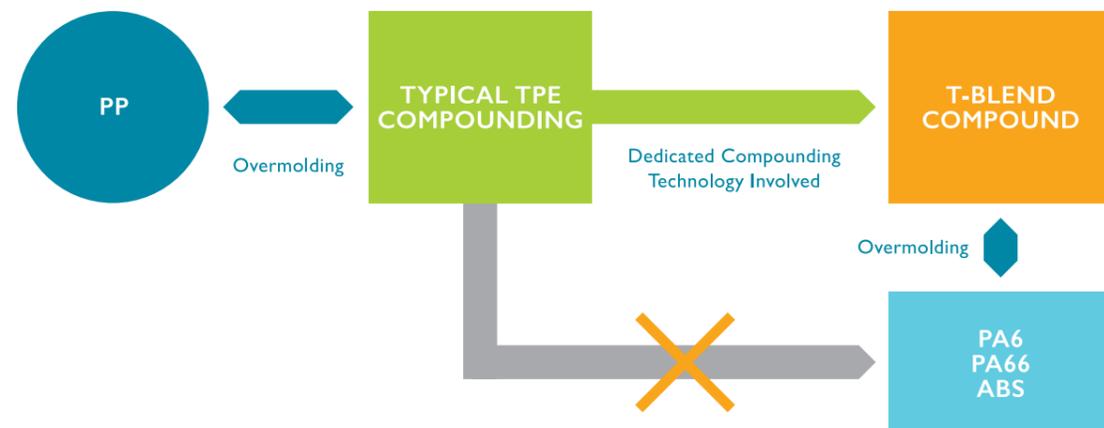
TPEs' OVERMOLDING

TPEs Compound Paste on Substrate (PP,ABS, PC, Nylon...)

Three Overmolding Mechanisms



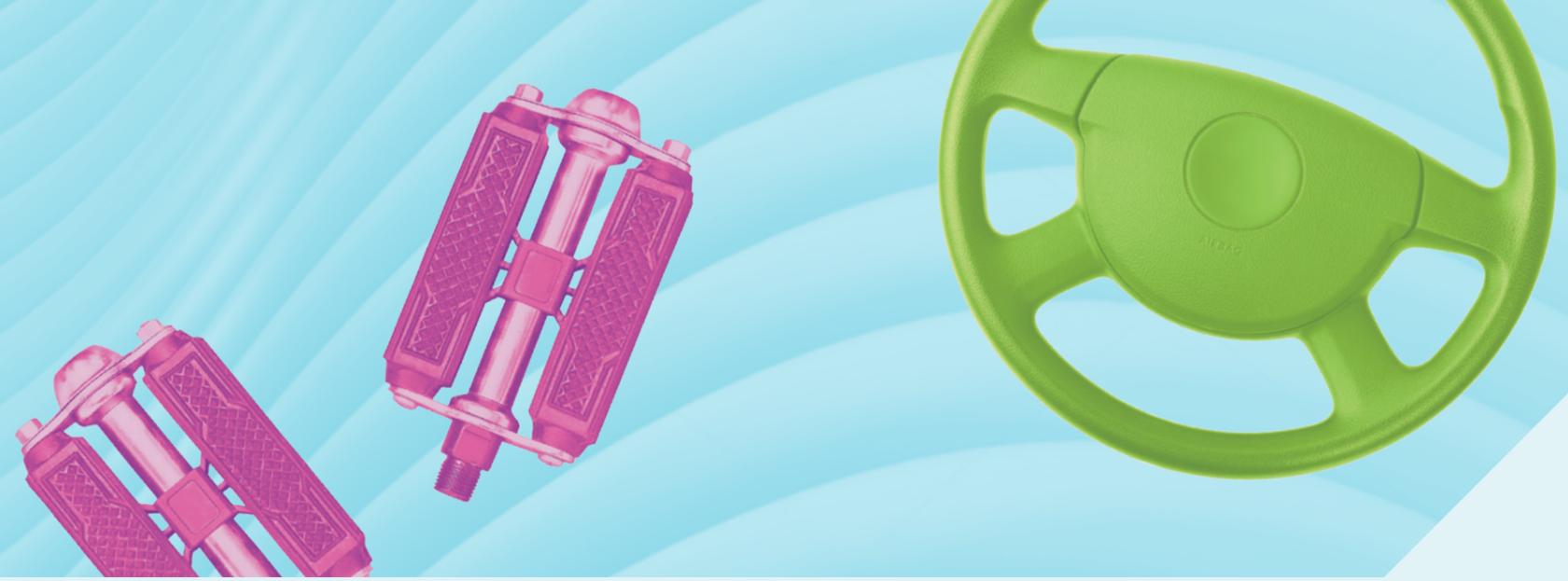
Mechanism of The T-BLEND Compound for Adhering to Engineering Plastics



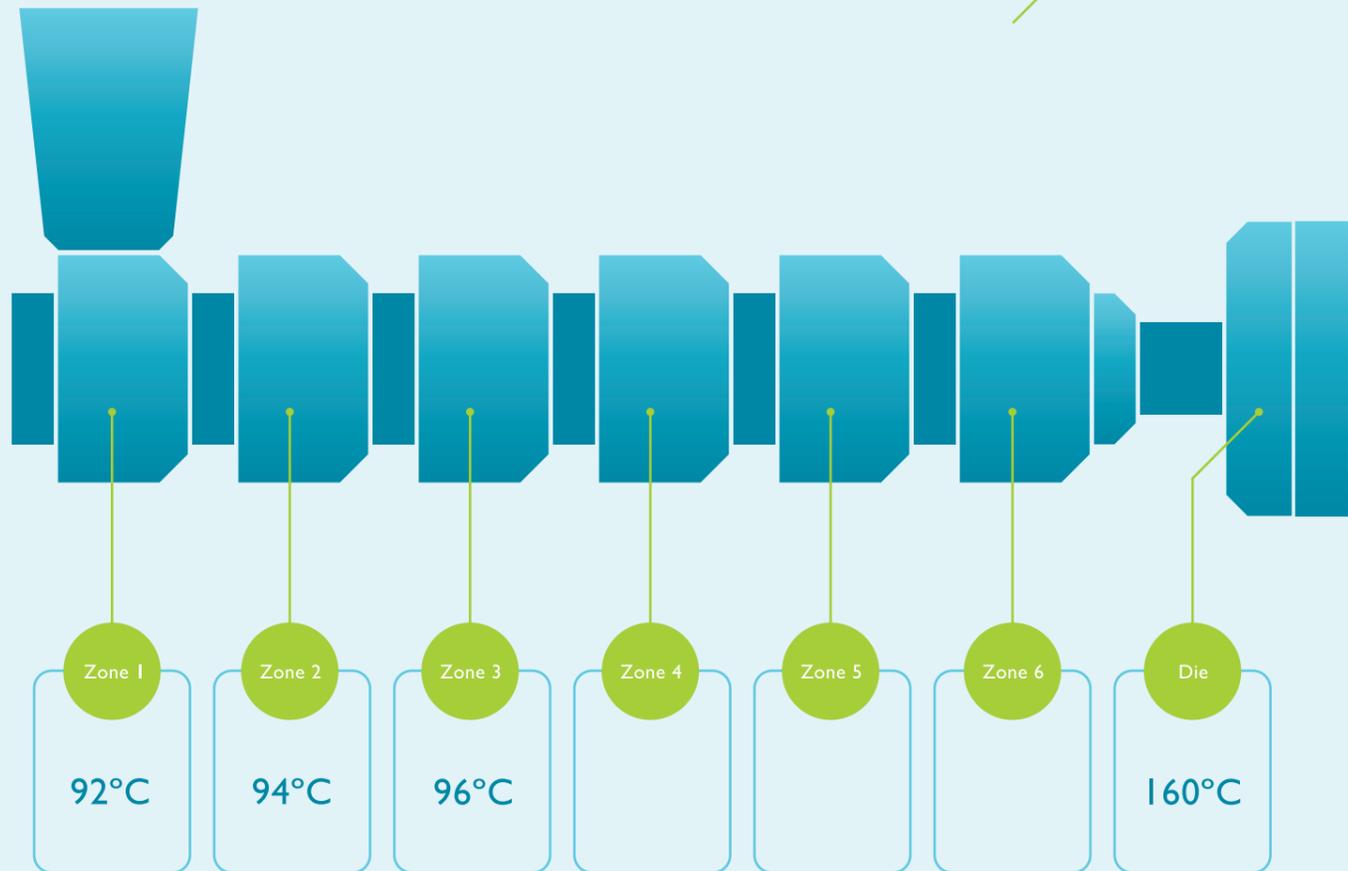
PRIME OVERMOLDING POLYMER GRADE

Grade	Thermoplastic Noted to be Overmolded	Color	Hardness (Shore A)	Specific Gravity	Tensile Strength (kgf/cm ²)	300% Modulus (kg/cm ²)	Elongation (%)	Melt Flow Rate (g/10min) 5kg at 180°C	Tear Strength (kg/cm)
		Test Method	ASTM D2240	ASTM D792	ASTM D412	ASTM D412	ASTM D412	ASTM D1238	ASTM D624
0101-35N-2	PP	Natural	29~35	1.05~1.11	18	15	400	3~30 (180°C, 2.16kg)	15
0200-40N	ABS	Natural	37-43	0.96-1.00	30	15	400	70-130	10
0200-60N	ABS	Natural	57-63	1.03-1.07	100	30	700	45-37	40
0200-65N	ABS	Natural	60-66	1.16-1.20	30	NA	500	35-75	24
0201-40N	ABS	Natural	37-43	1.00-1.04	25	9	600	70-170	9
0201-45N	ABS	Natural	27-33	1.07-1.11	15	10	400	50-150	10
0201-50N	ABS	Natural	47-53	1.04-1.08	30	12	800	30-90	15
0203-70N	ABS	Natural	65-71	1.03-1.07	100	30	600	45-37	35
0204-55N	ABS	Natural	50-56	1.13-1.17	20	-	250	50-150	12
0300-60N	Polyamides (PA's, Nylons)	Natural	53-59	0.98-1.02	26	23	450	11-35 (180°C, 2.16kg)	20
0300-70N	PA's	Natural	67-73	1.00-1.06	51	46	400	7-23	39
0300-90N	PA's	Natural	88-94	0.99-1.03	110-130	30	450-600	20-40	90-110
0400-55C	Polycarbonate (PC)	Translucent	49-55	0.90-0.94	50	15	800	40-80	20
0400-60N	PC	Natural	57-63	1.00-1.06	56	45	400	5-25	44
2100-90N	Polyolefins (PP/PE)	Natural	87-93	0.99-1.03	100	60	600	15-35	55
2102-10T	PP/PE	Translucent	17-23AO	0.85-0.89	5	1	800	5-15	1.5
2103-35T	PP/PE	Natural	32-38	0.86-0.90	30	12	600	1-11	12
2104 65I	PP/PE	Translucent	62-68	0.87-0.91	60	35	700	1-9	20
2104-45N	PP/PE	Natural	42-48	1.03-1.07	15	16	400	56-65	10
2125-50N	PP/PE	Natural	47-53	1.02-1.06	20	15	500	8-16	15
4404N-SP	PP	Natural	41~47	1.02~1.08	18	12	230	25~55 (180°C/5KG)	13
4692C-PC	PC	Transparent	49~55	0.9~0.96	42	31	590	25~45 (180°C, 2.16kg)	27
5031N-SI	PP	Natural	50~56	0.99~1.05	25	22	240	5~20 (180°C, 2.16kg)	20
6594 65N	PA's	Natural	62-68	0.99-1.03	40	35	400	20-60	25
6594-65B	PA's	Black	62-68	0.98-1.02	35	30	450	30-70	20
6800-55N	ABS/PC	Natural	57~63	1.06~1.10	35	15	700	100~160	15
6800-65N	ABS/PC	Natural	63~69	1.02~1.06	40	20	700	20~40	20

PROCESSING GUIDE

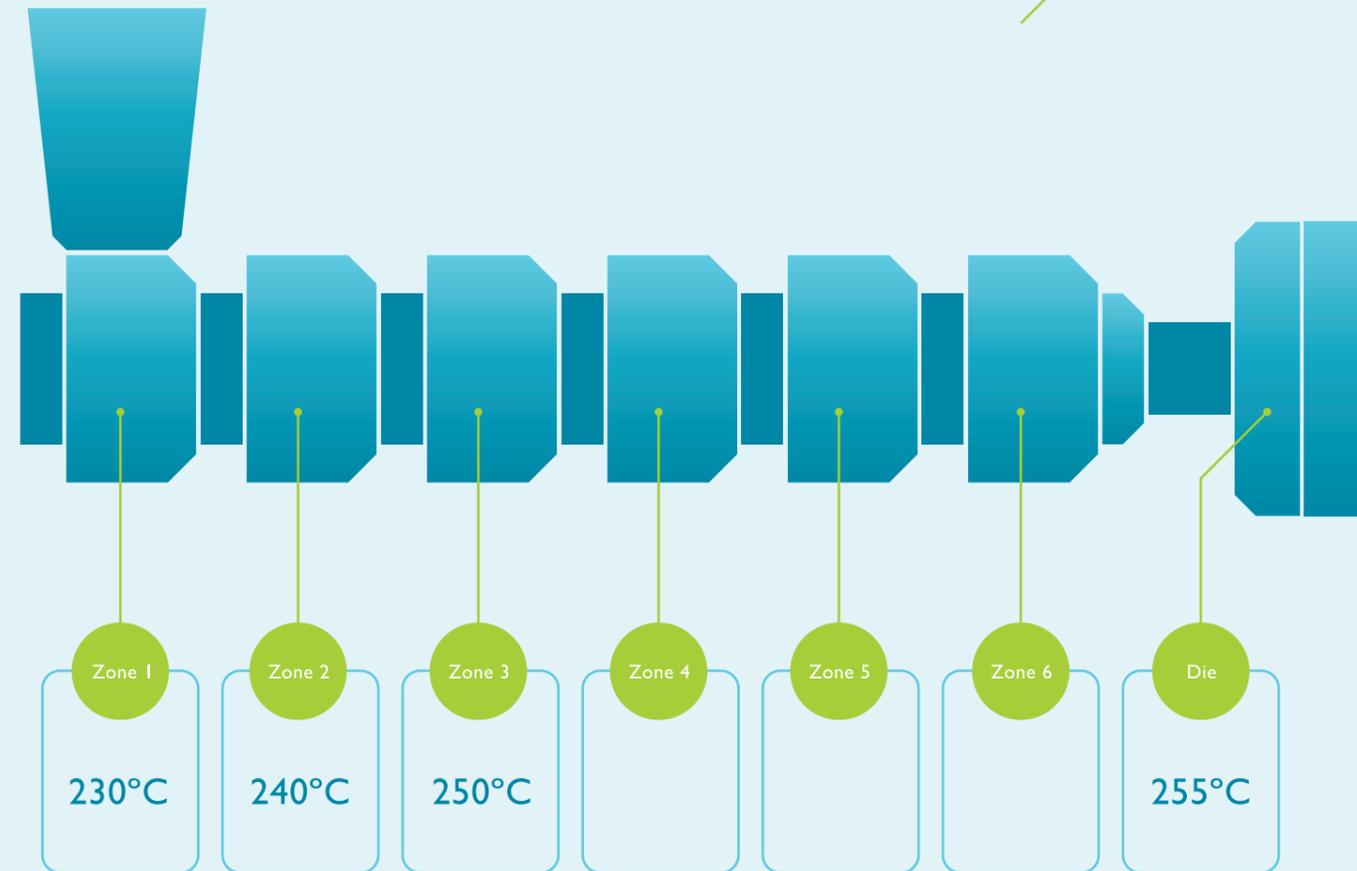


RECOMMENDED START-UP TEMPERATURE FOR INJECTION FOAMING



The above recommendation has been made using our best available knowledge; results may vary depending on the actual grades selected. Actual parameters will depend on the machine used for molding.

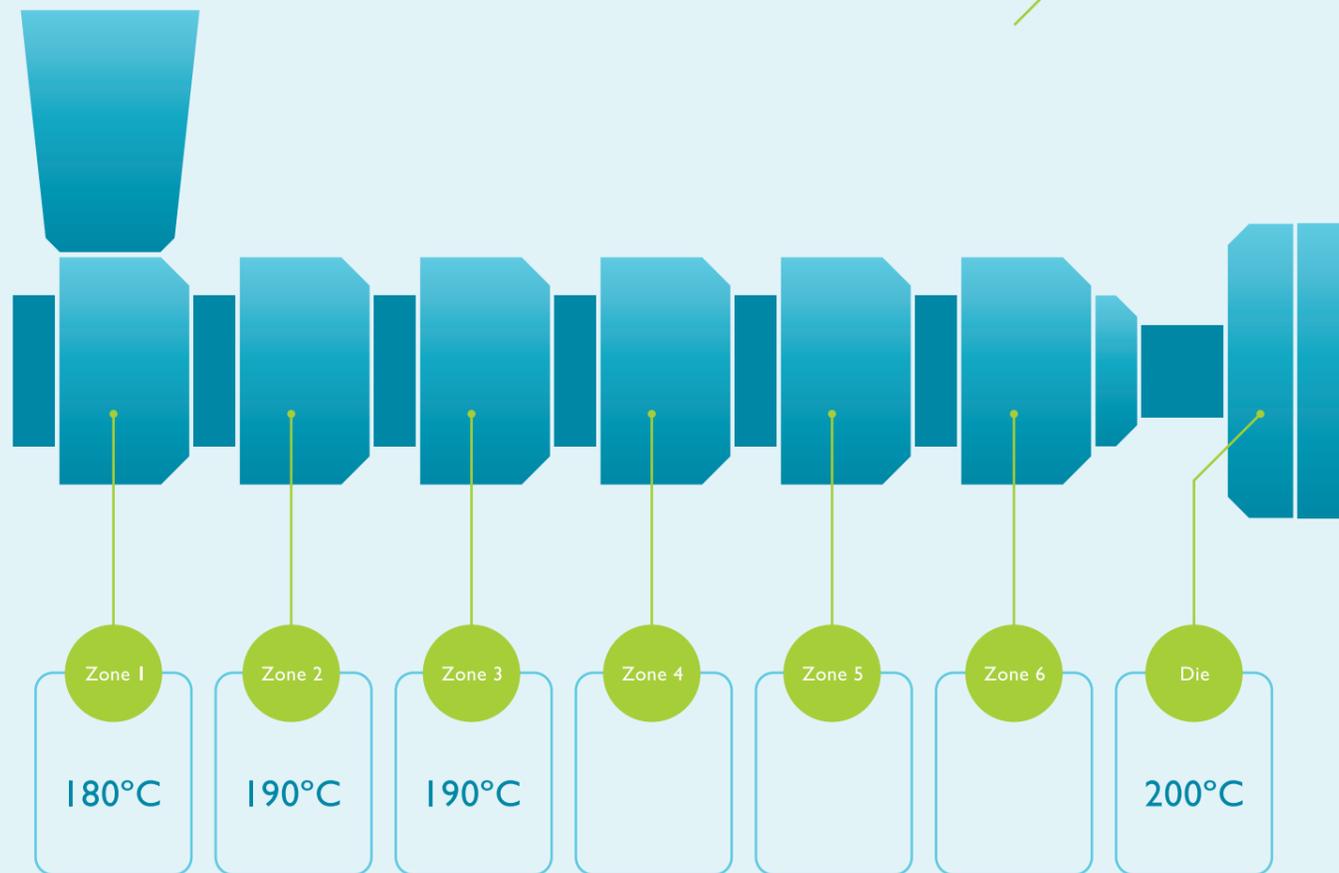
RECOMMENDED START-UP TEMPERATURE FOR OVERMOLDING FOR PA



The above recommendation has been made using our best available knowledge; results may vary depending on the actual grades selected. Actual parameters will depend on the machine used for molding.

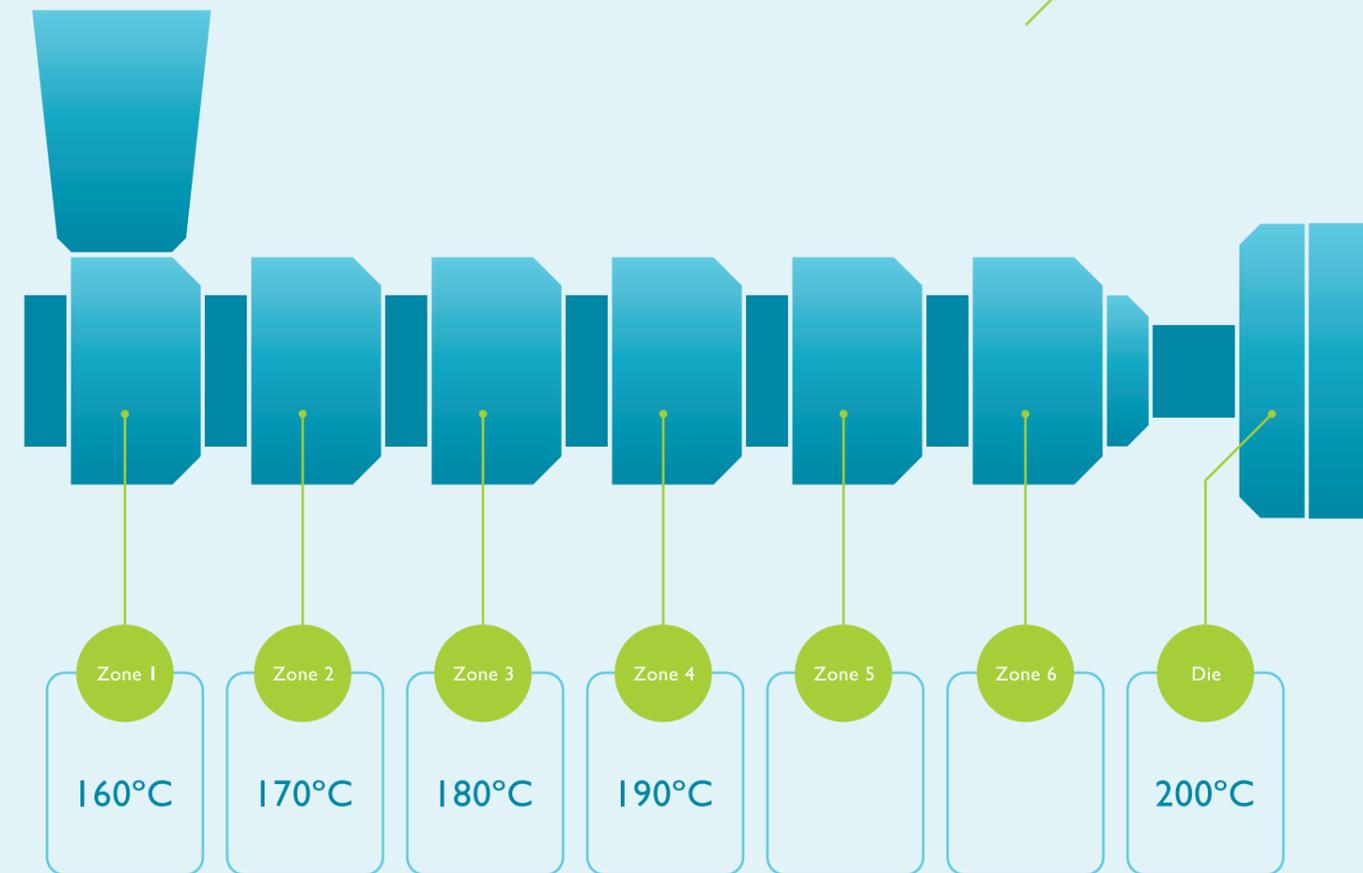


RECOMMENDED START-UP TEMPERATURE FOR OVERMOLDING FOR PP/PE/PS



The above recommendation has been made using our best available knowledge; results may vary depending on the actual grades selected. Actual parameters will depend on the machine used for molding.

RECOMMENDED START-UP TEMPERATURE FOR GEL



The above recommendation has been made using our best available knowledge; results may vary depending on the actual grades selected. Actual parameters will depend on the machine used for molding.

MEDICAL SOLUTION

TSRC focuses on the development of new polymer technology platforms and applications, including high-end hydrogenated styrenic block polymer (HSBC) novel technology platforms, the development of medical SEBS products and technologies, among others. The US Food and Drug Administration (FDA) believes that SEBS materials are non-toxic, non-allergenic, non-mutagenic, and do not react with human tissues. They present good performance across aspects of sealing, temperature stability, and anti-aging, and can also be directly sterilized by autoclave, gamma radiation and EO. Such qualities make it a suitable material for medical device applications such as IV bags, IV tubing, surgical drapes, resuscitators, tourniquets, etc.

TSRC series products can meet market needs for medical applications. Among its key features as compared with traditional materials, TSRC series products do not contain any plasticizers and provide excellent mechanical properties, high transparency, and excellent polyolefin compatibility. Its qualities allow it to meet the stringent quality control requirements of medical applications.





ASSEMBLED PP CAP

OUTER CAP + INNER CAP + SEBS ELASTOMER

Isoprene Rubber Can be Replaced by TSRC SEBS Formulated Material

Internal Tests Passed Piercing, Particle Shedding, and Leakage Tests

Certified by ISO 10993-5 Cytotoxicity Test

Pharmaceutical Packaging Materials (Ybb Standard)

TEST ITEM	METHOD	SPECIFICATION	TSRC TEST RESULT
Piercing Residue		<20 Pcs	●
Penetration Force	YBB 00232004-2015:	<75 N	●
Self-Sealing	Pharmaceutical Synthetic Isoprene Rubber Stopper	5.2mm Spike No leak out	●
Needle Retention		No pull out	●
Ash Content	-	<25%	●



CO-INJECTION CAP

CO-INJECTION MOLDING (PP + SEBS ELASTOMER)

TSRC SEBS Formulated Material Co-injection with PP

External Tests Passed Piercing, Particle Shedding, Self-sealing, and Retention Force (Dynamic & Static)

Certified by ISO 15759

Certified by ISO 10993-5 Cytotoxicity Test

Compliance with Integrated Container Closure System Guidelines

Pharmaceutical Packaging Materials (Certification)

TEST ITEM	METHOD	SPECIFICATION	TSRC TEST RESULT
Piercing Residue	Plastic and Metal Spike	<10 Pcs	●
Penetration Force	3016-2021 Technical Guide	5.2 mm Plastic Spike <75N	●
Self-Sealing	for Co-Injection Closure	0.8 mm Metal Spike No leak out	●
Needle Retention (Dynamic)	for Intravenous Container	Plastic and Metal Spike Spike>5N; Metal>1N	●
Needle Retention (Static)		5.2 mm Plastic Spike No leak out, No pull out	●



PHARMACEUTICAL PACKAGING MATERIALS

Mechanical Properties of Medical Sealing Components

TEST ITEM	METHOD	UNIT	TSRC TEST RESULT
Hardness	ASTM D2240	Shore A	35
S.g	ASTM D297	-	0.97
MFI (230°C/5kg)	ASTM D1238	g/10min	14.4
Tensile Strength	ASTM D412	MPa	4.5
Elongation	ASTM D412	%	438
Compression Set	ASTM D395 (70°C)	%	26
Ash Content	TGA	%	10

IV TUBING

FEATURES

- Material is easily recyclable and serves as an eco-friendly alternative to PVC, free from environmental hormones.
- Enhanced heat resistance allows sterilization by high-pressure steam; also suitable for EtO and gamma sterilization.
- Tubing characteristics: High transparency, excellent flexibility, kink resistance, and high production efficiency.

Complies with Medical Regulations

"0" Plasticizers

High Transparency

Suitable for EtO and Gamma Sterilization

KEY PROPERTIES



EXCELLENT KINK RESISTANCE



EXCELLENT CLAMP RESISTANCE



GOOD BONDING STRENGTH

Adjustable Tube Hardness To Meet Diverse Application Needs

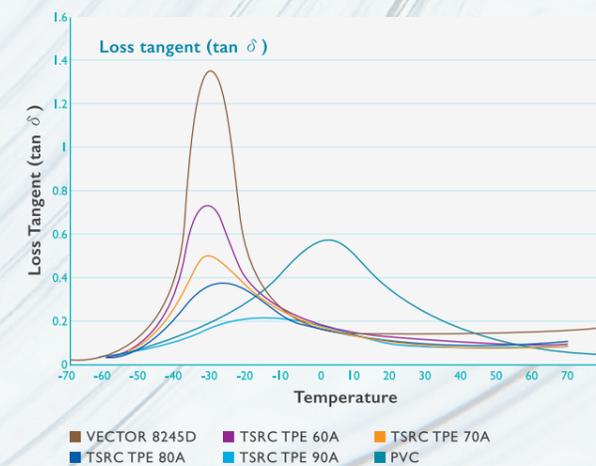
TEST ITEM	UNIT	TSRC SOLUTION				PVC
Hardness	Shore A	60	70	80	90	79
Proportion		0.89	0.89	0.89	0.89	1.22
MFI (230°C/2.16 Kg)	g/10min	4.0	4.6	5.1	6.2	-
Tensile Strength	Mpa	7.7	11.5	14.2	15.9	15.9
Elongation	%	738	560	500	486	357
Kink Resistance	mm	18	21	22	25	19
Clamp Leakage	sec	1	<1	<1	<1	<1

DYNAMIC MECHANICAL ANALYSIS

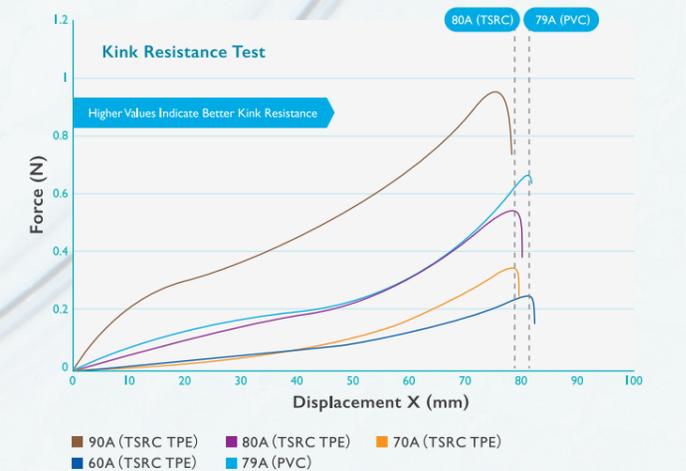
Rheological Properties Similar to PP — Easy to Process



Lower Glass Transition Temperature Than PVC, Offering Better Low-temperature Flexibility



At The Same Hardness, The Tubing's Kink Resistance Test Results are Comparable to PVC Tubing





PROCESSING MODE

- Injection
- Extrusion

IV CHAMBER

- Complies with Medical Regulations
- Contains “0” Plasticizers
- Supports Multi-cavity Molding and Easy Demolding
- Suitable for EtO and Gamma Sterilization

T-BLEND GRADE	UNIT	TSRC SOLUTION	PVC
Hardness	Shore A	90	92
Melt Flow Rate (230°C/2.16kg)	-	0.89	1.25
Tensile Strength	g/10min	8	-
Elongation	Mpa	17	20
Kink Resistance	%	550	300
Clamp Resistance	g/pcs	2.2	3.5



PROCESSING MODE

- Extrusion Blowing
- Extrusion Casting

SURGICAL DRAPES

- Passed ISO 10993-5 and GB/T16886 test
- Environmental friendly and recyclability
- Soft touch
- Good skid resistance
- Excellent elasticity
- Good air permeability
- Good heat sealing performance

T-BLEND GRADE	UNIT	6002-75L	6007-75L
Hardness	Shore A	75	78
Specific Gravity	-	0.95	0.95
Melt Flow Rate (180°C/5kg)	g/10min	3	6
Tensile Strength	MPa	7	8
M300	MPa	5	5
Elongation	%	500	600
Tear Strength	kg/cm	30	40
Form	-	Pellets	Pellets
Color	-	Blue	Blue




PROCESSING MODE

- Extrusion

TOURNIQUETS

- Passed ISO 10993-5 and GB/T16886 Test
- Environmental friendly and recyclability
- Soft touch
- Good skid resistance
- Excellent elasticity

T-BLEND GRADE	UNIT	6101-50N
Hardness	Shore A	50
Specific Gravity	-	0.92
Melt Flow Rate (180°C/5kg)	g/10min	2
Tensile Strength	MPa	6
M300	MPa	3
Elongation	%	600
Tear Strength	kg/cm	20
Form	-	Pellets
Color	-	Natural




PROCESSING MODE

- Injection

RESPIRATION EQUIPMENT

- Passed ISO 10993-5 and GB/T16886 Test
- FDA 177.1210
- Soft touch
- Good skid resistance
- Excellent elasticity
- Good heat sealing

T-BLEND GRADE	UNIT	2102-50T
Hardness	Shore A	47
Specific Gravity	-	0.89
Melt Flow Rate (180°C/5kg)	g/10min	30
Tensile Strength	MPa	4
M300	MPa	2
Elongation	%	700
Tear Strength	kg/cm	20
Form	-	Pellets
Color	-	Translucent



PROTECTIVE MASKS

PROCESSING MODE

- Injection

- Passed ISO 10993-5 and GB/T16886 Test
- FDA 177.1210
- Soft touch

- Good skid resistance
- Excellent elasticity
- Good air permeability

- Low odor

T-BLEND GRADE	UNIT	2113-35T	2113-45T	2116-50T	2141-55N	2122-55T	2116-60T
Hardness	Shore A	37	45	50	55	58	62
Specific Gravity	-	0.88	0.88	0.88	1.14	0.88	0.88
Melt Flow Rate (180°C/5kg)	g/10min	40	50	50	40	30	100
Tensile Strength	MPa	2.5	3	3	4	6	8
M300	MPa	1.5	2	2	2	2	3
Elongation	%	600	600	400	700	600	700
Tear Strength	kg/cm	10	15	15	20	20	20
Form	-	Pellets	Pellets	Pellets	Pellets	Pellets	Pellets
Color	-	Translucent	Translucent	Translucent	Natural	Translucent	Translucent



PROCESSING MODE

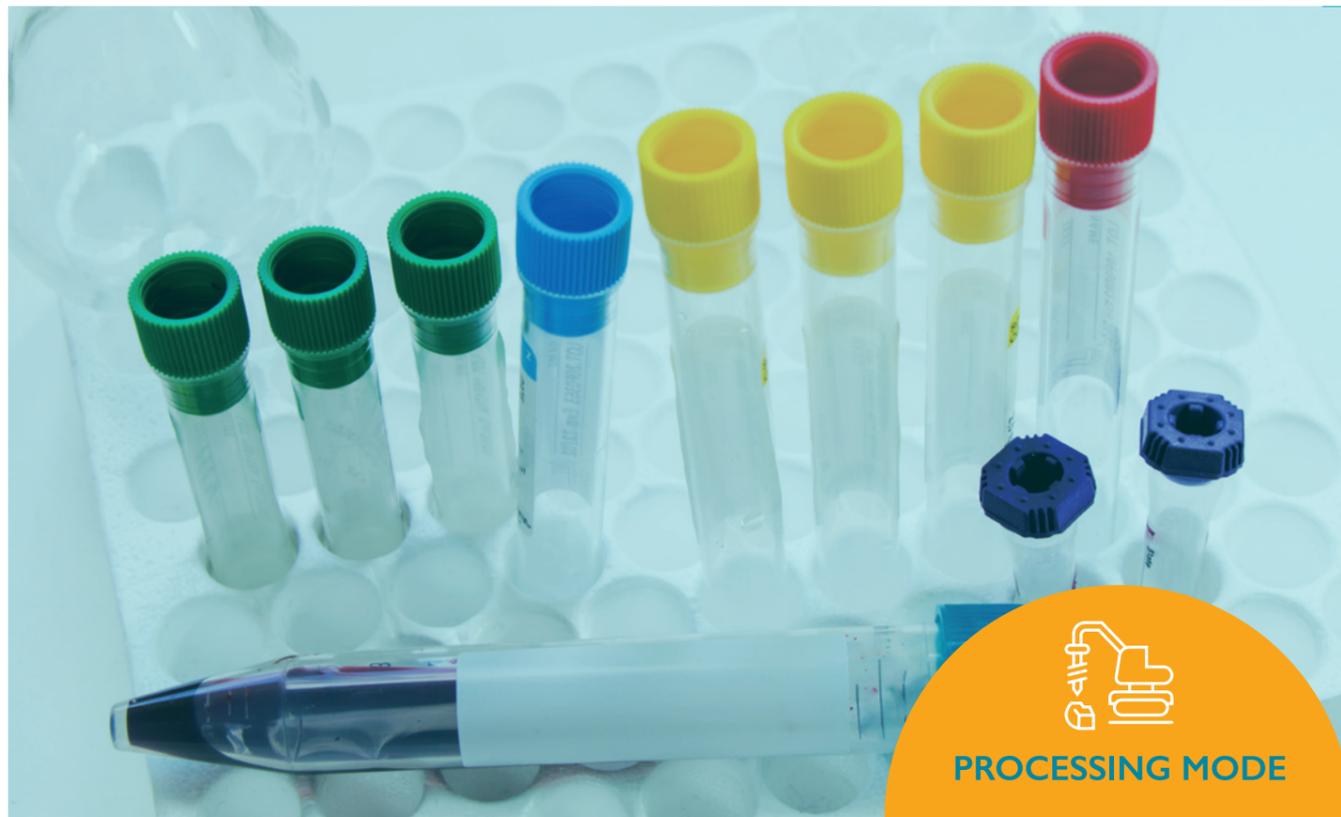
- Injection

INDUSTRIAL CASTER

- Passed ISO 10993-5 and GB/T16886 Test
- Silent
- Anti-sliding

- Wear resistance
- Excellent elasticity
- Suitable for PP overmolding

T-BLEND GRADE	UNIT	0112-45N	0112-55N	0112-65T	0112-75N	0113-75T
Hardness	Shore A	45	55	65	75	75
Specific Gravity	-	1.03	1.02	0.88	0.97	0.88
Melt Flow Rate (180°C/5kg)	g/10min	150	160	8	180	150
Tensile Strength	MPa	5	6	5	10	10
M300	MPa	1.5	2	3.5	3	3
Elongation	%	800	800	600	700	700
Tear Strength	kg/cm	15	15	20	30	30
Form	-	Pellets	Pellets	Pellets	Pellets	Pellets
Color	-	Natural	Natural	Translucent	Natural	Translucent



TESTING KIT

- Passed ISO 10993-5
- Clarity and visibility
- Viable sterilization through gamma radiation
- Excellent durability and strength

T-BLEND GRADE	UNIT	6101-90T
Hardness	Shore D	43
Specific Gravity	-	0.89
Melt Flow Rate (180°C/5kg)	g/10min	40
Tensile Strength	MPa	150
M300	MPa	100
Elongation	%	500
Tear Strength	MPa	60
Form	-	Pellets
Color	-	Translucent


PROCESSING MODE
 • Injection



REAGENT GASKET

- Passed ISO 10993-5
- Passed Leakage Test (60°C*240h)
- Viable EO sterilization
- Improved compression set and tightness properties.

T-BLEND GRADE	UNIT	3002-45N
Hardness	Shore A	45
Specific Gravity	-	0.89
Melt Flow Rate (180°C/5kg)	g/10min	1.5
Tensile Strength	MPa	30
M300	MPa	30
Elongation	%	300
Tear Strength	MPa	10
Form	-	Pellets
Color	-	Natural

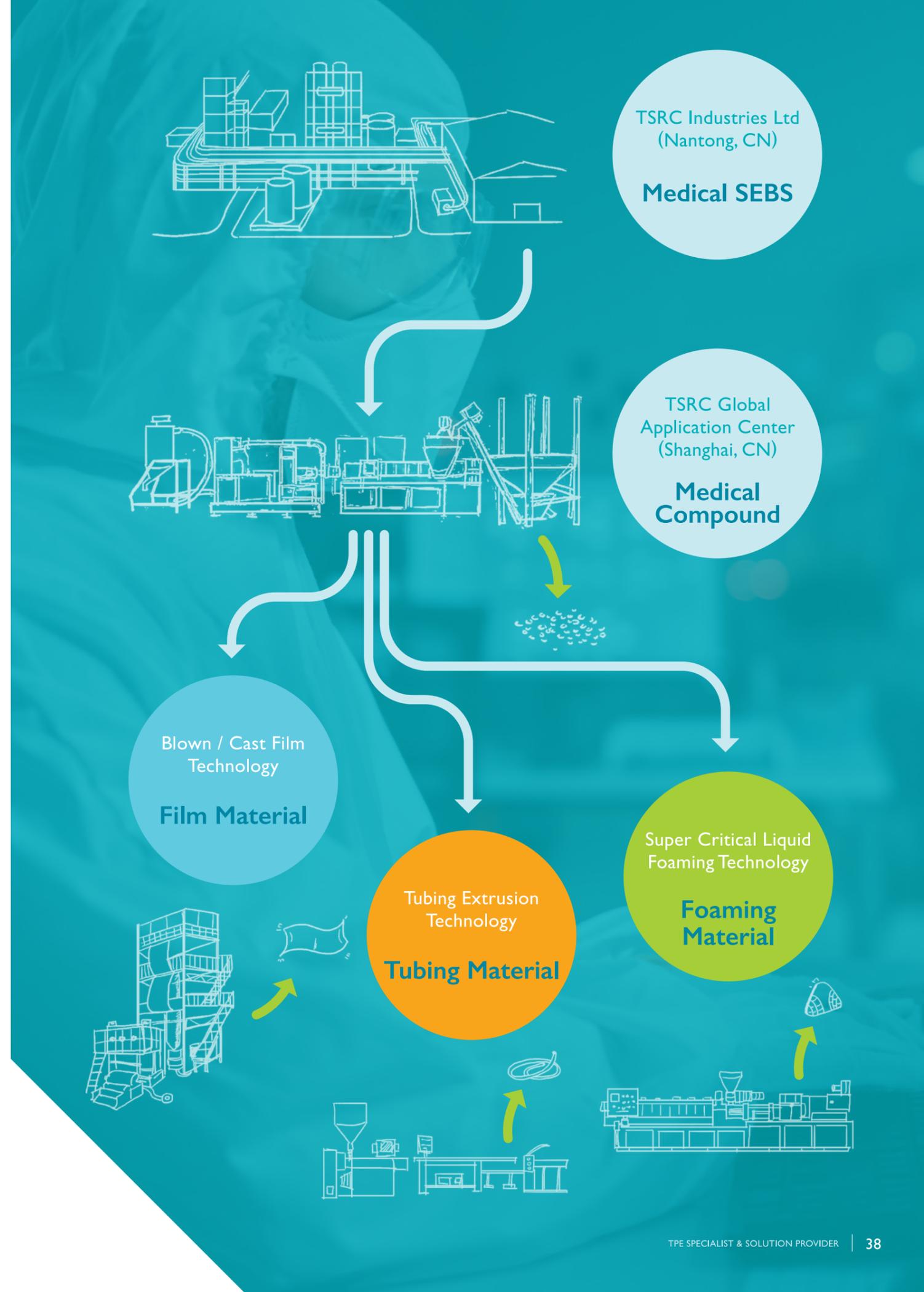

PROCESSING MODE
 • Injection



CRYOGENIC VIALS

- Passed ISO 10993-5
- Clarity and visibility
- Viable sterilization through gamma radiation
- High Izod notched impact strength
- Excellent resistant to cryogenic embrittlement, at -196°C for 10 minutes

T-BLEND GRADE	UNIT	2100-95T-50
Hardness	Shore D	50
Specific Gravity	-	0.90
Melt Flow Rate (180°C/5kg)	g/10min	15
Tensile Strength	MPa	-
M300	MPa	-
Elongation	%	-
Tear Strength	MPa	-
Form	-	Pellets
Color	-	Translucent

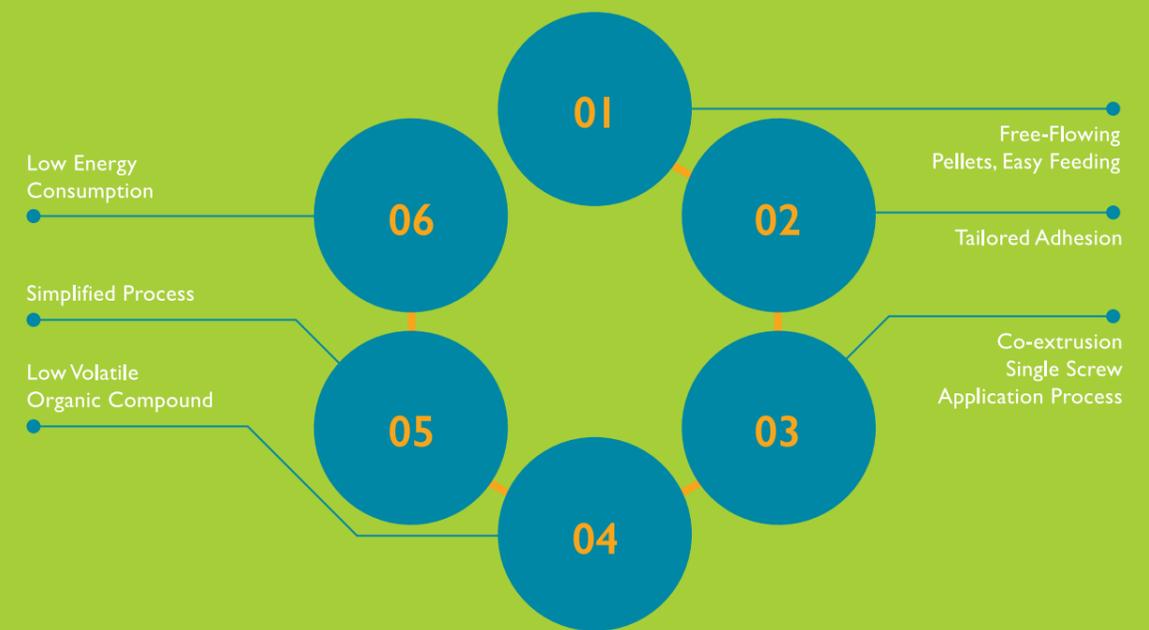




SURFACE PROTECTIVE FILMS

The series (for surface protective films) are developed for the manufacture of co-extruded surface protective films that apply easily, maintain tack with minimal build, peel smoothly and remove completely with little-to-no residue. In addition to simplifying processing, this series (for surface protective films) reduce volatile organic compound (VOC) emissions during manufacturing.

ADVANTAGES OF THE SERIES (FOR SURFACE PROTECTIVE FILMS)



PEEL PROPERTY



MARKETS AND APPLICATIONS

The series (for surface protective films) grades are formulated for varying levels of peel strength in co-extruded protective films to provide improved protection during the fabrication, assembly, shipment, storage and installation of finished goods across many end-use applications.



PHYSICAL PROPERTIES OF THE SERIES (FOR SURFACE PROTECTIVE FILMS)

Peel Strength (180°)

GRADE	DP7501	DP7503	DP7504	DP7508	DP7510	6111-55N	6113-60N
Peel Strength	Medium	Medium-Low	Super-Low	High	Low	Medium	Medium-Low
Hardness (Shore A), 10 sec.	22	32	72	37	44	53	63
MI (190°C 2.16kg)	26	20	10	30	16	28	15
Specific Gravity	0.92	0.93	0.92	0.94	0.93	0.92	0.94
Tensile at Break (kgf/cm ²)	30	75	125	75	120	110	100
Elongation at Break (%)	700	630	630	560	590	995	690
Tear (kgf/cm)	9	15	49	20	25	32	36
Peel Strength	Stainless Steel						
30 min @ Room Temperature	420	200	30	520	130	420	200
1 day @ Room Temperature	430	250	35	690	150	430	330
7 day @ Room Temperature	440	400	50	730	180	480	400



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