

Lubrizol
LifeScience Polymers

Medical Device Solutions



| **Linking** Science to Life

Lubrizol

LifeScience Polymers' innovative, continually growing product line is moving the medical industry forward and enhancing quality of life – serving as a vital link between science and life.

Specifically formulated for superior biostability, biocompatibility and processing versatility, our polymer systems are trusted throughout the industry.

Tecoflex™ - Aliphatic Polyether TPUs

PRODUCT	HARDNESS	FLEX MODULUS*	ELONGATION**
EG-80A	72A	1,000	660
EG-85A	77A	2,300	550
EG-93A	87A	3,200	390
EG-100A	94A	10,000	370
EG-60D	51D	13,000	360
EG-65D	60D	37,000	360
EG-68D	63D	46,000	350
EG-72D	67D	92,000	310
EG-80A-B20/B40	73A/78A	1,200/1,500	710
EG-85A-B20/B40	83A/86A	2,700/3,700	630
EG-93A-B20/B40	90A/95A	5,000/4,700	440
EG-100A-B20/B40	93A/98A	17,000/14,000	370
EG-60D-B20/B40	55D/65D	27,000/27,000	370
EG-65D-B20/B40	63D/78D	82,000/97,000	320
EG-68D-B20	73D	76,600	340
EG-72D-B20/B40	75D/82D	125,000/179,000	270

*Flexural Modulus (psi): ASTM D790 **Elongation (psi): ASTM D412



Tecoflex™ Aliphatic polyether TPU available in a variety of durometer, color and radiopacifier formulations. Tecoflex polymers are easy to process and resist yellowing by aging.

Tecophilic™ Aliphatic polyether TPU formulated to absorb from 20% to 1,000% by weight of the dry resin, while maintaining much of its properties. Solution or extrusion grades available.

Carbothane™ Aliphatic polycarbonate TPU available in a variety of durometer, color and radiopacifier formulations. Carbothane is easy to process, offers excellent oxidative stability and provides long-term stability.

Tecothane™ Aromatic polyether and polyester TPU available in a variety of durometer, color and radiopacifier formulations. Tecothane resins offer improved solvent resistance and strength.

Tecothane™ Soft Aromatic polyester hydrocarbon-based TPU currently available in a natural 62A Shore durometer. Tecothane Soft resins deliver unique surface characteristics, unique physical properties and lower specific gravity.

Pellethane® Aromatic TPUs available in polyether and polyester forms. Available in natural color and a wide range of durometers.

Isoplast® Aromatic TPU available in impact-modified, clear, pre-colored and glass-filled grades. Isoplast is designed for rigid polymer requirements.

Applications

Our technologies are used in numerous applications, including:

Cardiac Assist, Gastroenterology, IV Therapy, Neurovascular, Orthodontics, Orthopedics, Urology, Vascular Access, Wound Care and others.

Tecophilic™ - Aliphatic Polyether TPUs

PRODUCT	HARDNESS	FLEX MODULUS*	ULTIMATE ELONGATION % DRY/WET**	H ₂ O ABSORPTION***
HP-93A-100	83A	2,900	1040/620	100%
HP-60D-20	43D	4,300	430/390	20%
HP-60D-35	42D	4,000	450/390	35%
HP-60D-60	41D	4,000	500/300	60%
SP-80A-150	70A		1000/600	150%
SP-93A-100	83A	2,900	1040/620	100%
SP-60A-60	41D	4,000	500/300	60%
TG-500	60D DRY		100/200	500%
TG-2000	60D DRY		100/WEAK GEL	900%

*Flexural Modulus (psi): ASTM D790; **Ult. Elongation (%): ASTM D412; ***H₂O Absorption: Lubrizol Method

Carbothane™ - Aliphatic Polycarbonate TPUs

PRODUCT	HARDNESS	FLEX MODULUS*	ELONGATION**
PC-3575A	73A	1,300	480
PC-3585A	83A	1,500	380
PC-3595A	94A	6,500	380
PC-3555D	55D	20,000	350
PC-3572D	71D	130,000	320
PC-3575A-B20	75A	2,100	530
PC-3585A-B20	85A	2,200	410
PC-3595A-B20	94A	6,800	430
PC-3555D-B20	55D	22,000	400
PC-3572D-B20	71D	135,000	300

*Flexural Modulus (psi): ASTM D790 **Elongation (psi): ASTM D412



Tecothane™ - Aromatic Polyether TPUs

PRODUCT	HARDNESS	FLEX MODULUS*	ELONGATION**
TT-1074A	75A	1,300	550
TT-1085A	85A	3,000	450
TT-1095A	94A	8,000	400
TT-1055D	54D	18,000	350
TT-1065D	64D	26,000	300
TT-1069D	69D	44,000	310
TT-1072D	74D	73,000	275
TT-1075D-M	75D	180,000	150
TT-2074A-B20/B40	77A/83A	1,800/2,800	650
TT-2085A-B20/B40	87A/88A	3,500/3,800	600
TT-2095A-B20/B40	97A/97A	8,500/12,000	450
TT-2055D-B20/B40	55D/64D	19,000/24,000	360
TT-22065D-B20/B40	67D/75D	31,000/58,000	300
TT-2069D-B20	70D	50,000	320
TT-2072D-B20	75D	80,000	270
TT-2075D-B20/B40	77D/84D	190,000/421,000	200

*Flexural Modulus (psi): ASTM D790 **Elongation (psi): ASTM D412

Tecothane™ Soft - Aromatic Polyester TPU

PRODUCT	HARDNESS	FLEX MODULUS*	ELONGATION**
AR-62A	62A	750	900

*Flexural Modulus (psi): ASTM D790 **Elongation (psi): ASTM D412

Pellethane® - Aromatic Polyether TPUs

PRODUCT	HARDNESS	FLEX MODULUS*	APP TYPE
2363-80A	81A		INJECTION
2363-80AE	85A		EXTRUSION
2363-90A	90A	11,000	INJECTION
2363-90AE	90A	10,000	EXTRUSION
2363-55D	55D	25,000	INJECTION
2363-55DE	53D	22,000	EXTRUSION
2363-65D	62D	32,000	INJECTION
2363-75D	76D	190,000	INJECTION

*Flexural Modulus (psi): ASTM D790

Isoplast® - Rigid TPU With Chemical & Impact Resistance

PRODUCT	HARDNESS	FLEX MODULUS*	CHARACTER
2510	116R	260,000	IMPACT MODIFIED
2530	121R	330,000	TRANSPARENT
2531	123R	340,000	TRANSPARENT
2540		1,500,000	LGF
2560		2,200,000	LGF

*Flexural Modulus (psi): ASTM D790

Backed by The Lubrizol Corporation, a global specialty chemicals company, LifeScience Polymers supplies clients with custom medical-grade products manufactured in ISO 9001:2008-registered facilities. Our quality management systems ensure that all of our products meet or exceed regulatory requirements. LifeScience Polymers can extrude tubing with the most demanding specifications, including:

- Extremely small diameters or complex lumen configurations
- Clear, pigmented or up to 60% radiopaque-filled tubing
- Co-extruded tubing with radiopaque striping

At **Lubrizol LifeScience Polymers**, we help link science to life. Through our innovative polymer solutions and world-class support services, we're equipping our customers for success, advancing the healthcare industry and – ultimately – improving lives.



For more information,
visit Lubrizol.com/LifeSciencePolymers
Or call us at 216-447-5000 / 888-234-2436 (toll free)



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