

PRODUCT DATA SHEET Pentaflow LF (Oil Free) TPE Tubing for Peristaltic Pumps PVC / LATEX / SILICONE / OIL FREE



Product Description	Oil Free TPE Tubing for Peristaltic Pumps – LF Type medical / pharma grade in varying diameters Soft, Medium and Hard grades (Other hardnesses after request)
Supply Form	25 m Rolls (a.o. after request)

Raw Material Properties

Property	Nominal Value	Units	Test Method
Hardness	from 55 to 75 ± 4	Shore A	DIN 53505
Density	0,89 – 0,90	g/cm ³	ISO 1183-1
Max. Elongation	> 700	%	DIN 53504-S1
Temperature Range	-50 to +125	°C	

Basic Characteristics

Brand Name	<i>Pentaflow LF 550M</i> [®] (<i>soft</i>), <i>Pentaflow LF 600M</i> [®] (medium soft), <i>Pentaflow LF 650M</i> [®] (medium), <i>Pentaflow LF 670M</i> [®] (medium/medium hard), <i>Pentaflow LF 700M</i> [®] (medium hard), <i>Pentaflow LF 750M</i> [®] (hard)
Origin of raw materials	Europe
Polymer	PP / SEBS based
Oil free grades	Yes
Intermediate hardnesses	Yes
Medical Grade / REACH compliant	Yes
Virgin (non recycled) raw material	Yes
Latex Free	Yes
DEHP Free	Yes
Ortho-Phtalate Free	Yes
Heavy metals Free	Yes
β - radiation stability	Yes

* Pentaflow LF grades are REACH compliant, sterilizable with gamma, EtO and steam and representative grades have passed cytotoxicity tests according to ISO 10993-5 and biocompatibility tests according to ISO 10993-10 (Intracutaneous Reactivity), ISO 10993-11 (Acute Systemic Toxicity) and USP Class VI. Materials featured on current brochure have proven to be a strong alternative as replacement to PVC a.o.; they are completely synthetic and latex free thereby minimizing allergy risks.



Main Product Features

Properties	Excellent elasticity with elevated heat stability, transparent, high level of purity and clarity, odorless, tasteless, non-toxic, sterilizable (plasma, steam, EtO a.o.), hardly meltable, high modulus, non deformable, top mechanical properties, ultra smooth bore for excellent flow, tight surface cure, non-tacky surface, excellent chemical resistance to a variety of media
Use	Ideal for liquid transportation via peristaltic pumps a.o. in medical and pharma applications, fluid handling for laboratory and analytical purposes a.o.
Dimensions	From I.D. X O.D = 1,0 X 2,0 mm up to I.D. X O.D = 16,0 X 20,0 mm (over 100 combinations) - Other dimensions upon request
Standards	EN ISO 9001: 2015, EN ISO 13485: 2016, EN ISO 10993
Shape	Circular
Dimensions Tolerances	Acc. To ISO 3302-1.E1
Appearance	Transparent
Color	None (natural) / Coloring for photo-sensitive substances handling applications available
Surface	Semi-Glossy
Printings	Optional
Use	Single
Directions	ISO 10993, European Pharmacopoeia §3.1.1.2, USP VI, other requirements surpassed (i.e. 10/2011/EC Food Contact Aplications Directive)
Certification	CE Mark
Classification	Class I , Ila (MDD 93/42/EEC & MDR 745/2017 EU)

Important informations

Packaging	25 m rolls (or other length after request) in PE transparent bags firmly sealed
Shelf Life	Min. 5 years
Storage Conditions	No direct sunlight - No moisture
Handling Precautions	Use No hook - Use No sharp articles - Open each packaging with care
Littering Precautions	See national regulations concerning environmental issues

Raw material Pentaflow LF 550[®], 600M[®], 650M[®], 670M[®], 700M[®] & 750M[®] and LF Type TPE Tubing for Medical Use are trademarks of PentaSil Med-Tech Engineering[®]. All products designed in Germany, made in E.U.

Issue Number : LF28052020 / Date of issue : 28.05.2020 / Previous issue from : 18.02.2019

PentaSil Med-Tech Engineering UG (haftungsbeschränkt)

MEDICAL TECHNOLOGY ENGINEERING Bockenheimer Landstraße 17/19 – 60325 Frankfurt a.M. – Germany T: +49 6996759643 – F: +49 6980883180 – info@pentasil.eu – www.pentasil.eu

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied is made. Buyer assumes all risks of use, storage, handling and disposal of the product in compliance with applicable national and local laws and regulations. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.