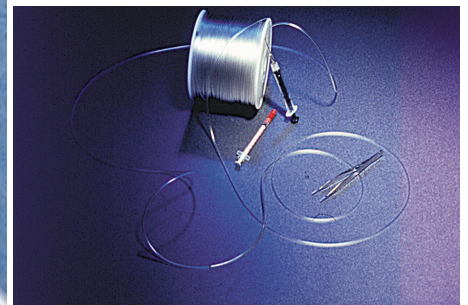




*biocompatible
kink resistant
Glass-smooth*



Physical Properties for high kink resistance

Tygon® ND 100-80 tubing is made from a biocompatible polymer that is not formulated with DEHP. This tubing is crystal clear for easy visualization of fluid flow. The physical properties of Tygon ND 100-80 enable manufacturing of smaller diameter tubes with a high resistance to kinking and collapse.

Characteristics

The unique chemistry enables Tygon® ND 100-80 to demonstrate very low extractables in both soapy water and refluxed water, which is rare for this type of material. Tygon® ND 100-80 also demonstrates excellent blood interaction characteristics making it well suited for applications such as intravenous or intra-arterial infusion.

During the extrusion process, individual product dimensions are maintained and monitored through in-line micrometers and off-line verification with computerized imaging equipment. Consistent with many medical tubing market requirements.

Tygon® ND 100-80 can be effectively bonded/welded using the following methods: heat, electronic (RF)/ ultrasonic, solvent and adhesive. Factors to be considered when selecting the components include: security of the bond required, effect on the integrity of the materials to be joined, and presence of residues or extractables that may affect biocompatibility. When bonding procedures are not used, mechanical clamps are recommended to provide secure attachment.

Regulations

Tygon® ND 100-80 tubing was formulated to meet the requirements of Regulation (EC) 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and does not contain any reportable substances or chemicals of concern. Tygon® ND 100-80 has met the requirements of Biological Test for Plastics Class VI, as described in USP <88> (2017).

Tygon® ND 100-80 is not intentionally made or manufactured with animal derived material.

Features and Benefits

- high rigidity for kink resistance
- compatible with blood
- crystal clear for easy visualization of fluid flow
- glass-smooth inner bore
- reduced flexibility for suction applications
- has met the requirements of Biological Test for Plastics Class VI, as described in USP <88> (2017)
- no reportable substances or chemicals of concern for REACH

Typical Applications

- intravenous or intra-arterial infusion

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Tygon® ND 100-80 Standard Sizes

Part Number	ID	OD	Wall	French Size	Needle Gauge
TY0,25ND0,76	0,254 mm (0.01")	0,762 mm (0.03")	0,254 mm (0.01")	3	30
TY0,51ND1,52	0,508 mm (0.02")	1,524 mm (0,06")	0,508 mm (0.02")	5	23
TY0,76ND2,29	0,762 mm (0.03")	2,286 mm (0.09")	0,762 mm (0.03")	7	20 - 21
TY1,02ND1,78	1,016 mm (0.04")	1,778 mm (0.07")	0,381 mm (0.015")	6	18 - 20
TY1,27ND2,29	1,27 mm (0.05")	2,286 mm (0.09")	0,508 mm (0.02")	7	17 - 18

Typical Physical Properties of Tygon® ND 100-80 Tubing

Property	ASTM Method	Value of Rating
Durometer Hardness	D2240	80° Shore A, 15s
Color	-	Clear
Tensile Strength	D412	2.625 psi (18,1 MPa)
Ultimate Elongation	D412	350,00%
Tear Resistance	D1004	48,2 kN/m (275 lb-f/inch)
Specific Gravity	D792	1,22
Compression Set, Constant Deflection @158°F (70°C) for 22 hrs.	D395 Method B	59,00%
Tensile Modulus, @100% Elongation	D412	1450 psi (10 MPa)
Maximum Recommended Operating Temperature	-	185 °F (85°C)
Brittleness by Impact Temperature	D746	-31°F (-35°C)
Water Absorption, % 24 hrs. @ 23°C	D570	0.1

Unless otherwise noted, all tests were conducted at room temperature (73°F). Values shown were determined on 0.075" thick extruded strip or 0.075" thick molded ASTM plaques or molded ASTM durometer buttons.

Tygon® ND 100-80 Characteristics

Tygon® ND 100-80 has met the requirements of Biological Test for Plastics Class VI, as described in USP <88> (2017)

Sterilization Methods

Autoclavable (Steam 30 min at 15 psi, 250°F / 121°C)	Yes
EtO (Ethylene Oxide)	Yes
Radiation (25 kGy / 2.5 Mrad)	Yes

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