# TYGON® INERT TUBING FORMULATION SE-200

For the ultimate in chemical resistance, purity, flexibility and clarity.

### FEATURES/BENEFITS:

- Crystal Clarity
- Improved Flexibility When Compared to Rigid Fluoropolymer Tubings
- Chemically Resistant
  and Inert
- Non-Contaminating Fluid Path
- Meets FDA and USP Class VI Criteria

# TYPICAL APPLICATIONS INCLUDE:

- Chemical Processing
- Pharmaceutical Processing and Filling
- Paint and Solvent Production and Packaging
- Adhesive Transfer Lines
- Semiconductor
  Processing
- Photographic
  Processing Equipment
- Beverage Dispensing
- Ink and Toner Feed Lines
- Fertilizer and Pesticide Distribution



Chemically resistant and non-contaminating, Tygon<sup>®</sup> Inert Tubing provides the outstanding clarity and flexibility of Tygon tubing combined with the inertness of a fluoropolymer.

## EXCELLENT CHEMICAL RESISTANCE

Without sacrificing the flexibility, glass-like clarity or outstanding bend radius for which Tygon tubing is known, Tygon Inert Tubing can handle many applications where flexible tubing of the past could not be used. Its FEP inner liner provides the ultimate in chemical resistance and can handle a wide variety of fluids from corrosives to MEKbased solvents. The inert liner limits potential of fluid contamination during transfer. Tygon Inert Tubing will not impart odor or taste, making it well-suited for food and beverage use. Tygon Inert Tubing combines all the benefits of Tygon with the inertness of a fluoropolymer, providing superior performance in many applications and industries.

#### MEETS USP CLASS VI AND FDA CRITERIA

Tygon Inert Tubing complies fully with the requirements of the USP XXIII Class VI criteria and is non-toxic, non-hemolytic and non-pyrogenic. In addition, Tygon Inert Tubing meets FDA 21 CFR Part 177.2600 criteria.



#### TYGON® SE-200 INVENTORIED SIZES

Norton Wall Minimum Maximum Working							um Working
Part Number	I.D. (inches)	O.D. (inches)	Thickness (inches)	Length (feet)	Bend Radius (inches)	Pressure at 73°F (psi)*   at 160°F (psi)*	
	(incres)	(incres)	(incres)	(1000)	(incres)	at 75 T (psi)	at 100 1 (p3)
AJD00002	1/16	1/8	1/32	50	1/2	100	45
AJD00007	1/8	1/4	1/16	50	1	85	40
AJD00012	3/16	5/16	1/16	50	1-1/2	75	38
AJD00017	1/4	3/8	1/16	50	2	55	35
AJD00028	3/8	9/16	3/32	50	3-1/2	50	25
AJD00038	1/2	3/4	1/8	50	4	45	18

\*Working pressures are calculated at a 1:5 ratio relative to burst pressure using ASTM D1599.

The values listed for working and burst pressures are derived from tests conducted under controlled laboratory conditions. Many factors will reduce the tubing's ability to withstand pressures including temperature, chemical attack, stress, pulsation and the attachment to fittings. It is imperative that the user conduct tests simulating the conditions of the application prior to specifying the tubing for use.

**Distributed By:** 

#### TYGON<sup>®</sup> SE-200 TYPICAL PHYSICAL PROPERTIES

Property	ASTM Method	Value or Rating	
Durometer Hardness Shore A, 15 Sec	D2240-97	67	
Color	_	Clear	
Tensile Strength psi (MPa)	D412-97	2000 (13.8)	
Ultimate Elongation, %	D412-97	350	
Tear Resistance lb-f/inch (kN/m)	D1004-93	165 (29)	
Specific Gravity	D792-91	1.45	
Water Absorption, % 24 hrs. @ 23°C	D570-95	<0.01	
Compression Set Constant Deflection, % @158°F (70°C) for 22 hrs.	D395-89 Method B	53	
Brittleness By Impact Temp., °F (°C)	D746-95	-40 (-40)	
Maximum Recom- mended Operating Temp., °F (°C)	_	170 (77)	
Dielectric Strength, v/mil (kV/mm)	D149-93	620 (24.4)	
Tensile Modulus, @ 100% psi (MPa) @ 300% psi (MPa)	D412-97	650 (4.5) 1450 (3.1)	
Tensile Set, %	D412-97	76	

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

#### TYGON<sup>®</sup> SE-200 TUBING IS NOT INTENDED FOR USE AS AN IMPLANT MATERIAL



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IMPORTANT: It is the user's responsibility to ensure the suitability and safety of Norton tubing for all intended uses. Laboratory and clinical tests must be conducted in accordance with applicable regulatory requirements in order to determine the safety and effectiveness for use of tubing in any particular application.

For a period of 6 months from the date of first sale, Norton Performance Plastics Corporation warrants this product to be free from defects in materials and workmanship. Our only obligation will be to replace any portion proving defective, or at our option, to refund the purchase price thereof. User assumes all other risk, if any, including the risk of injury, loss or damage, direct or consequential, arising out of the use, misuse, or inability to use, this product. THIS WARRANTY IS IN LIEU OF THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. No deviation is authorized.