TYGON®
Excellence By Design

Tygon® Ink 1000

Ultra Chemical Resistant Tubing for UV Ink Transfer Applications

For UV inks in particular, UV blocking properties is an industry standard. Tygon® Ink 1000 has shown over an accelerated testing phase that it can maintain the ink integrity with our patented technology, making it an ideal candidate for the UV market.

Chemical Resistance

In the ink transfer space, chemical compatibility and flexibility are two of the most important criteria for ensuring satisfactory performance. Tygon® Ink 1000 was specially engineered to deliver premium performance in an environment where UV inks are used such as digital printing and 3D printing applications. This product has been tested with a variety of diluents (IBOA, VMOX, HDDA, etc.) and has shown excellent chemical resistance properties over an extended testing phase.

Typical Applications

- Digital printing
- Inkjet printing
- Wide format printing
- Packaging printing
- 3D printing

Features and Benefits

- Outstanding chemical resistance to small acrylic monomers
- Flexibility
- UV blocking
- Low extractable levels
- Long service life

SAINT-GOBAIN

Tygon® Ink 1000

Tygon® Ink 1000

Part Number	ID		OD		Wall Thickness		Length		Min. Bend Radius		Max. Working Pressure				Vacuum Rating	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(ft)	(m)	(in)	(mm)	73°F (psi)	23°C (bar)	122°F (psi)	50°C (bar)	73°F (inHg)	23°C (mmHg)
A0C1S1517	0.118	3	0.197	5	0.039	1	49.2	15	0.375	9.5	131	9.0	82	5.7	29.9	760
A0C1S1518	0.157	4	0.236	6	0.039	1	49.2	15	0.625	15.9	107	7.4	71	4.9	29.9	760
A0C1S1520	0.236	6	0.315	8	0.039	1	49.2	15	0.75	19.1	75	5.2	57	3.9	29.9	760

Typical Physical Properties

Property	ASTM Method	Value or Rating Inner	Value or Rating Outer
Durometer Hardness, (Shore A), 15 sec	D2240	54 (Shore D)	90
Flex Modulus, MPa	D790	6820	159
Tensile Strength, psi (MPa)	D412	2730 (18.8)	2330 (16.1)
Ultimate Elongation, %	D412	410	470
Tear Resistance, lb-f/inch (kN/m)	D1004	800 (0.09)	525 (0.06)
Compression Set Constant Deflection, % @ 158°F (70°C) for 22 hours	D395 Method B	34	54
Specific Gravity	D792	0.93	0.91
Water Absorption, % 24 hrs at 73°F (23°C)	D570	< 0.01	0.067
Max. Recommended Operating Temperature °F (°C)	-	131 (55)	
Color	-	Black	

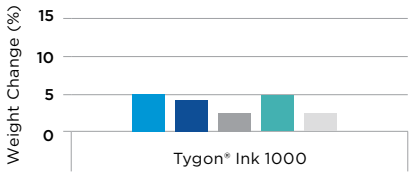
Unless otherwise noted, all tests were conducted at room temperature (73°F). Values shown were determined on 0.075" thick extruded strip or 0.075" thick molded ASTM plaques or molded ASTM durometer buttons.

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.

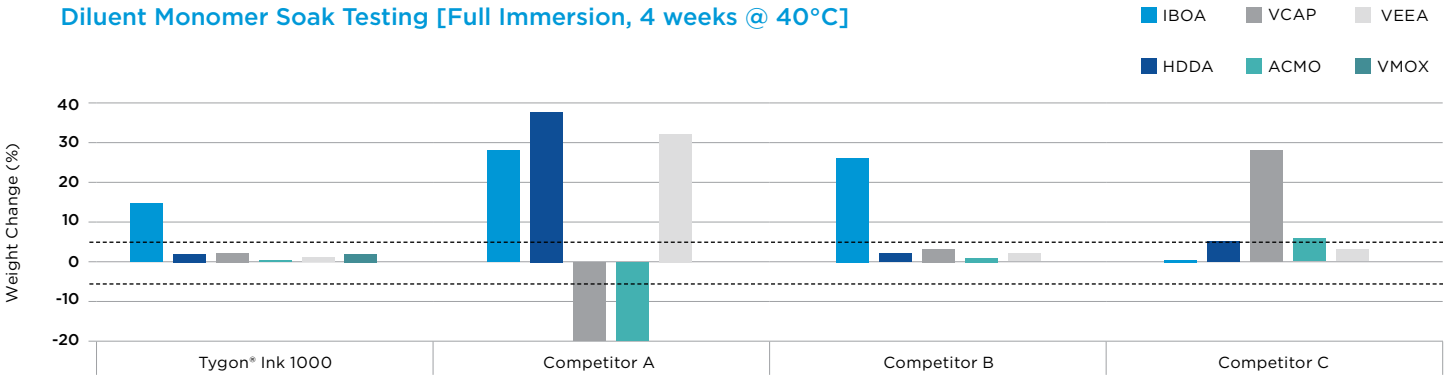
Product Characteristics

Opacity	Opaque
UV Blocking (min. 200-550nm)	Yes

Diluent Monomer Soak Testing [Cap-and-Fill, 4 weeks @ 40°C]



Diluent Monomer Soak Testing [Full Immersion, 4 weeks @ 40°C]



Note: Passable weight change limits are indicated by the dashed lines (±5% weight gain or loss).

SAINT-GOBAIN

Saint-Gobain Performance Plastics
2664 Gilchrist Road
Akron, OH 44305

1-800-798-1554
Tel: (330) 798-9240
Fax: (330) 798-6968

www.ics.saint-gobain.com