



Preliminary Data Sheet

RoHS and WEEE Compliant

Description: POLYONICS XF-448 is a polyester film with a 5 mil permanent pressure sensitive acrylic adhesive and a high opacity, gloss white finish specifically designed for thermal transfer printing.

Use: POLYONICS XF-448 is designed for barcode or alphanumeric identification of products with low surface energy requiring a label such as wood, fabric, and plastic as well as oily surfaces such as machine parts. Perfect for product I.D., nameplates, instruction and/or warning labels, WIP labels etc.

PROPERTIES	TEST METHODS	AVERAGE RESULTS	
		USA UNITS	SI UNITS
Thickness	ASTM D1000		
-Substrate		0.002 inch	0.0508 mm
-Adhesive		0.005 inch	0.1270 mm
-Total		0.007 inch	0.1778 mm
Adhesion to:	ASTM D-3330		
-Stainless steel	15 minute dwell	109 oz/in	119 N/100 mm
	72 hour dwell	140 oz/in	153 N/100 mm
Tack	ASTM D2979	25 oz	710 grams
Polyken™ Probe			
1 second dwell			
Drop Shear	PSTC	> 100 hrs	> 100 hrs

All SI units are mathematically derived from U.S. conventional units.

Note. All values shown are averages and should not be used for specification purposes. Test data and test results contained in this document are for general information only and shall not be relied upon by POLYONICS customers for designs and specifications, or be relied on as meeting specified performance criteria. Customers desiring to develop specifications or performance criteria for specific product applications should contact POLYONICS for further information.

PROPERTIES	TEST METHOD
Heat/Chemical Resistance	POLYONICS

Samples printed with recommended thermal transfer ribbon using a Zebra 90Xi printer. Labels printed with 3:1 ratio barcodes with 6 mil X dimension bars. Samples exposed to indicated environments.

TEST ENVIRONMENT	PCS ¹	READ RATE ²
Control	99%	100%
230°C heat, 5 minutes	99%	100%
Kyzen Corp. Aquanox SSA	100%	99%
30% aqueous, 40-45°C, 10 minutes ³		
RE-ENTRY. KNI 2000 Terpene, 40-45 °C, 10minutes ³	98%	100%
Cont. pg. 2		
Alpha Metals Inc. EC-7R Terpene, 40-45° C, 10 minutes ³	98%	100%
Alpha Metals Inc. 2110 Saponifier 6% aqueous, 65-70°C, 10 minutes	97%	100%
Isopropanol 99%, 82°C, 10 minutes	99%	100%
Deionized Water, 100°C, 10 minutes	99%	100%



¹PCS - Print Contrast Signal. PCS determined with Quick Check 650, 0.005" aperture, 660 nm wavelength. Quick Check 650 manufactured by: Photographic Sciences Corp.

² Read rate determined using PSC 850 laser scanner.

³ Followed by 2 minute immersion in deionized water at 100°C

Shelf Life: 1 year below 80°F (27°C) and 60% R.H.

References:

Aquanox SSA-™ is a trademark of Kyzen Corporation. Zebra® printer is a trademark of Zebra Technologies, Inc. EC-7R™ is a trademark of Petroferm Inc. Polyken™ is a trademark of the Kendell Corporation.

RE-ENTRY™ is a registered trademark of Environsolv Inc. **References:** AISI: American Iron and Steel Institute (U.S.A.) ASTM: American Society for Testing and Materials (U.S.A.) PSTC: Pressure Sensitive Tape Council (U.S.A.) SI: International Systems of Units.

WARRANTY-LIMITATION

Polyonics' products are sold with the understanding that the buyer will test them in actual use and determine for him/herself their adaptability to his/her intended uses. Polyonics warrants to the buyer that its products are free from defects in material and workmanship, but limits its obligation under this warranty to replacement of the products shown to Polyonics' satisfaction to have been defective, provided that the Purchaser has complied with the handling, storage and shelf life requirements as specified by Polyonics in applicable materials specifications. The Purchaser shall return the products using Polyonics' return policy as stated above.

The above warranties extend solely to Purchaser and all warranty claims must be made by Purchaser. Rework or Replacement shall neither extend nor decrease the original warranty period. The term of all warranty periods shall not exceed thirty (30) days from the date of the original shipment.

THE ABOVE WARRANTIES ARE EXCLUSIVE OF AND IN LIEU OF ALL OTHER WARRANTIES, WRITTEN OR ORAL, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE. NO IMPLIED STATUTORY WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY. POLYONICS SHALL NOT BE LIABLE EITHER IN TORT OR IN CONTRACT FOR ANY LOSS OR DAMAGE, DIRECT, INCIDENTAL OR CONSEQUENTIAL, ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT, OR FROM DELAY IN THE REPLACEMENT OR REPAIR OF PRODUCTS UNDER THE ABOVE WARRANTY.