

Description: Polyonics XF-807 is an aluminum label material with a permanent pressure sensitive, high-temperature acrylic adhesive and a **high opacity, white topcoat** specifically designed for thermal transfer printing on aluminum labels.

Use: Polyonics XF-807 aluminum label material is designed for barcode or alphanumeric identification of hot (up to 842°F, **or 450°C**) metal items. After cured, the printed aluminum label resists smearing, even when the product and label are directly removed from a hot environment.

The choice of thermal transfer printer can make a real difference as well on the overall aluminum label performance. Our materials can be used with most industrial thermal transfer printers. Testing for specific printer and ribbon is mandatory for each application.

Properties	Test Method	Average Results	
		USA Units	SI Units
Thickness	ASTM D1000		
-Substrate		0.0024 inch	0.061 mm
-Adhesive		0.0024 inch	0.060 mm
-Total		0.0048 inch	0.121 mm
Adhesion	Polyonics 80313		
-Stainless Steel	20 minute dwell	≥ 41 oz/in	45N/100 mm
	24 hour dwell	≥ 55 oz/in	60N/100 mm
Tack	Polyonics 80155	≥ 1800g	
Thermal Characteristics	Operating Temp. -40°F up to 842°F (-40°C to 450°C) Application Temp. Typical 70°F to 100°F (21°C to 38°C)		
Shelf Life*	1 year below 80°F (27°C) and 60% R.H.		
Ribbon Recommendations	Armor AXR7+, AXR8, DNP R510, R316, Fujicopian FTX304, FTX306		

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

Notes: 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. All values shown are averages and should not be used for specification purposes. Customers desiring to develop specifications or performance criteria for specific product applications should contact Polyonics for further information.

References:

ASTM: American Society for Testing and Materials (U.S.A.) (U.S.A.)

SI: International Systems of Units





***Shelf Life:** Customer experience, supported by our laboratory data clearly show that XF-807 aluminum label material can be stored for at least one year in an environment below 80 degrees F and 60% RH. We are confident that our product will perform well beyond this time frame. However, it remains the responsibility of the user to assess the risk of using such product. We encourage customers to develop functional testing protocols that will qualify a product's fitness for use, in their actual applications.

Surface conditions: Slight surface imperfections such as microcracks, pick-up (sparkles or bumps) and die lines are often caused by local variations in the microstructure of the foil due to size and distribution of intermetallic particles, grain size and grain orientation/texture. Such imperfections are common and beyond our control. This material is not recommended for high density small print labels.

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 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.

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