



8000T Cryocool

Low temperature storage / liquid nitrogen resistant labels

Thermal Transfer

Description:

8000T Cryocool is a 58 micron thermal transfer printable polypropylene label coated with a high performance acrylic adhesive for use in cryogenic applications. This adhesive offers resistance to temperatures as low as -196°C for liquid nitrogen applications.

It is designed for use with Zebra 5095 resin thermal transfer ribbon to produce excellent print quality. The smear/scratch resistance and low temperature adhesion performance make 8000T Cryocool an excellent choice for applications requiring a combination of image durability and extreme low temperature adhesion.

Empfohlene Anwendungen

Tiefemperaturanwendungen, welche Objekte auf Temperaturen von bis zu -151°C herunterkühlen. 8000T Cryocool kann ebenso Trockeneis (-80°C), Hochdrucksterilisation und Gammastrahlung ausgesetzt werden.

- medizinische Labors
- Universitäten/ Forschungseinrichtungen
- Krankenhäuser

Technical Specifications

	Description	Caliper
Facestock	White top coated polypropylene	58 microns
Adhesive	High Performance Permanent acrylic	20 microns
Liner	White Kraft liner	58 microns
		Total 136 microns

Recommended Zebra Ribbons: 5095

Minimum Application Temperature: -29°C

Service Temperature Range: -196°C to 90°C

Recommended Storage Conditions: One year duration when stored at 0°C to 21°C at 35% to 50% RH

Expected Exterior Life: 6 months



Lead Time:

This is a category C product: Extended lead-time applies (max 40 days) and minimum order value apply. Available as custom product.

Test Procedure

Labels were applied to glass vials (2.8 cm OD), polypropylene centrifuge tubes (3.5 cm OD, 50ml) and glass microscope slides and allowed a 24 hour dwell time before exposure to above conditions.

Environment	Test Method	Typical Results
High Temp.	30 days at listed temperature	No visible effect at 90 C (194 F)
Low Temp.	30 days at -70 C (-94 F)	No Visible effect
Freezer	3 cycles of 16 hours at -70 C (-94 F)/ 8 hours at room temp.	Glass vial : Recommended PP centrifuge tube: Recommended Glass microscope slide: Recommended Flat PP: Recommended
Pressure Cooker	3 cycles of 1 hour in 121 C (250 F) 15 psi pressure cooker/ 23 hours room temperature	Glass vial : Recommended PP centrifuge tube: Recommended Glass microscope slide: Recommended Flat PP: Recommended
Liquid Nitrogen	3 cycles of 4 hours at - 196 C (-320 F)/ 20 hours at room temperature	Glass vial : Not recommended PP centrifuge tube: Recommended Glass microscope slide: Recommended Flat PP: Recommended
Freezer to boiling water	1 hour at -70 C (-94 F) then placed in boiling water 100 C (212 F)	Glass vial : May work, must test PP centrifuge tube: Recommended Glass microscope slide: May work, must test Flat PP: Recommended
Liquid Nitrogen to boiling water	1 hour at -196 C (-320 F) then placed in boiling water 100C (212 F) for 10 minutes	Glass vial : Not Recommended PP centrifuge tube: Recommended Glass microscope slide: May work, must test Flat PP: Recommended

180 Degree Peel Room Temperature Peel Adhesion

180 Peel (g/in)	Steel		Polyethylene		Polypropylene	
	5 min	24 hour	Loop Tack	24 hour	Loop Tack	24 hour
	810	908	360	408	317	408

Product Performance and Suitability

All information on this document is to be used for guidance only and is not to be used for setting specifications. All purchasers of Zebra products shall be responsible for independently determining if the product conforms to all requirements of the application.

For testing of this material, please order SAM66680