

Document: TDS-CryoTape_MAP-2026

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PRODUCT DESCRIPTION

CryoTape® series from East Far are a family of cryogenic-temperature, lightweight adhesive tapes engineered to secure and bond CryoMLI® series insulation materials in cryogenic environments, including liquid helium (4K) applications. Drawing on thermal control expertise and manufacturing excellence, combined with extensive field experience in aerospace, transport cryogenic vessels, and medical applications, East Far delivers customized solutions to ensure optimal performance under the most demanding conditions. CryoTape® MAP is a 3-ply PET/Al/PET laminate tape with strong adhesion and excellent conformability, widely used in LNG/LH₂ tanks, ISO containers and storage tanks.

PRODUCT CONSTRUCTION

Structure	PET Film / Aluminum Foil / PET Film / Modified Acrylic Adhesive (Cryo)
Substrate	PET Film / Aluminum Foil / PET Film
Total Thickness	0.078 mm
Length	50 m
Width	10 / 15 / 20 / 25 / 30 / 50 mm
Custom Width	Available (MOQ 2,000 rolls)
Adhesive Type	Modified Acrylic (Cryo)

Service Temperature: 4K (−269°C) - 393K (120°C) continuous / 423K (150°C) short-term

FEATURES

- ✓ High quality material — Liquid Helium (4K) compatible
- ✓ Strong adhesion (≥1.0 KG/25mm)
- ✓ Excellent conformability
- ✓ Easy to wrap, shape or cut
- ✓ Aging resistance
- ✓ Excellent chemical stability
- ✓ Stable performance across extreme thermal cycling

TYPICAL PHYSICAL PROPERTIES

Note: The following technical information should be considered representative only and should not be used for specification purposes.

Test	Typical Value	Test Method
Adhesion	≥1.0 KG/25mm	PSTC-101
Color	Silver-white	Visual
Holding Power	≥48 hr	PSTC-107
Application Temperature Range	4K (−269°C) - 393K (120°C) continuous / 423K (150°C) short-term	Application test
Tensile Strength	140 N/25mm	PSTC-131
Elongation at Break	30%	ASTM D-3759
Shelf Life	24 months from date of manufacture	Internal
Initial Tack (Rolling Ball)	Steel Ball No. 14-16	PSTC-6
Instantaneous Initial Tack	>8.8 N/25mm (>900g)	PSTC-101
Low-Temp Performance (−30°C / −196°C)	No embrittlement, no delamination	Internal
Liquid Helium (4K) Field Proven	Confirmed reliable performance in actual LHe applications	Field

APPLICATION MARKETS

- ✓ Aerospace, aircraft and rocket parts
- ✓ Cryogenic vessels and transfer lines
- ✓ LNG / LH₂ tanks
- ✓ ISO containers / Storage tanks
- ✓ Liquid helium applications
- ✓ Superconducting cables
- ✓ Nuclear fusion cryogenic modules

Recommendation: To mitigate detachment risk from vibration during cryogenic tank transportation, it is recommended to wrap CryoTape® FiG as the outermost layer for additional mechanical protection.

CLASSIFICATIONS & COMPLIANCE

Fire Safety Properties	
Flame Spread Index (ASTM E84 / UL 723)	≤ 25
Smoke Developed Index (ASTM E84 / UL 723)	≤ 50
UL Classification	Class A (ASTM E84 / UL 723)
Backing Flammability	Non-combustible (Aluminum Core)
Adhesive Flammability	Flame Retardant (Modified Acrylic)
UL 510 (PSA Tape)	Compliant

Standards: Compliant with GB/T 31480-2015 · GB/T 31481-2015 (ISO 201010:2014) · NB/T 47059-2017

STORAGE & SHELF LIFE

Storage: Store in a clean, dry place. Recommended conditions: 4 – 26°C (40 – 80°F) and 40 – 50% relative humidity.
Shelf Life: 12 months from date of manufacture when stored under recommended conditions.

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