

Cryogenic insulation material details

Product Name	Classification	Product size	Specification	Performance / Features
COOLCAT 2NF	Film + spacer laminate	1 m Width x 3 m Sheet	9 μ Aluminum Film: 10 Layers / Glass Fiber Fleece spacer 11 layers	<ul style="list-style-type: none"> · 10 layers of aluminum foil sandwiching 11 layers of glass fiber spacers. · Combine heat resistance and incombustibility. · It has self-extinguishing property even under 100% gas oxygen environment and it is also used for automotive hydrogen occlusion tank (under extremely low temperature). · Add nylon tag pins at 0.2 m pitch and overlap. · To keep higher performance, avoid compression, it is recommended to loosely install with 7 mm thickness / 10 layer installation gap. · Max baking temperature (baking temperature): :.523K(=250°C)
		1.5m Width x 3m Sheet	6μm Double sided aluminum polyester film / nonwoven fabric Spacers: 10-layer section laser cuts	
		1.5m Width x 50m Roll		
COOLCAT 2NW	Film + spacer laminate	1.5m Width x 50m Roll	12μ double sided aluminum polyester film / nonwoven fabric Spacers: 10-layer section laser cuts	<ul style="list-style-type: none"> · 10 layers of polyester foil (double-sided aluminum vapor deposition) and 10 layers of nonwoven fabric sandwiched between them. · Mainly used for MRI and NMR cryostat (low temperature device) due to high thermal performance and ease of handling. · SI with spacer provides higher thermal performance compared with crimson SI. (Corner at the time of compression affects) · Since nonwoven fabric stabilizes its dimensions, compared with conventional Coolcat 2 (net spacer) Easy handling and effective wearing can be provided. · Thickness of each layer among ten layers 1.4 mm. Avoid compression to improve performance. · Install at least 3 layers of space (Insulation Gap) in each layer of 10 layers loosely. (* 30 layers are 9 mm, overlapping 60 layers are 18 mm) · All polyester foils are aluminum deposited, the surface resistance is 0.8 ohms / square (The coating film is limited to 40 nm or less) · Max baking temperature (baking temperature): 423K(=150°C)
		1.9m Width x 50m Roll		
COOLCAT 2LOX	Film + Spacer laminate	1m Width x 3m Sheet	9 μ Aluminum Film / Glass Fiber Spacer : Each 5 Layers	<ul style="list-style-type: none"> · 5 layers of quasi-aluminum foil and five layers of glass fiber spacers sandwiched between them. · Oxygen products according to ASTM D 2512-95 · The glass fiber spacer is desized and heat cleaned. · Insulation of natural components · Glass fiber diameter: 5 μm (not sucking in) · Temporarily fix with 0.2 m pitch with nylon tag tag pin. · The thickness of each layer of 10 layers is only 0.4 mm. · To get better thermal performance, avoid using compression. · It is recommended that a space of 1 mm is made in each layer of 10 layers and worn. · Max baking temperature (baking temperature): :623K(=350°C)

COOLCAT 2NI	Film + Spacer product	0.75m Width x 3m Sheet	Single side aluminum deposition / 12 m polyester film	<ul style="list-style-type: none"> · 10 layers of polyester foil + one side aluminum deposition (10 mm x 10 mm square) · 10 layers of nonwoven fabric polyester spacer goods · Minimize overcurrent and provide high thermal performance. · It is mainly used in superconducting magnet field of the following applications <ul style="list-style-type: none"> ① Reduce the thermal noise of the magnetic sensor ② Prevent wasteful heat of superconducting equipment (fault current limiter, generator, motor etc).
		0.8m Width x 60m Roll		
COOLCAT 4K	Cryogenic sheet material	Roll of 1.83 m width x 20 m	Aluminum vapor deposited / 12 m polyester film / 6 m aluminum foil (8 μm in total)	<ul style="list-style-type: none"> · Low absorptivity as a thin plate of a helium tube. · 6μ aluminum foil + 12μ polyester film, double-sided aluminum vapor deposition. · Low absorptivity of aluminum characteristics and easy handling of polyester. · It breaks like aluminum and does not become crisp and reduces labor. · The width can be up to 1,830 mm and the product can be delivered up to 1,750 mm. · Provided by NC laser cutting. · The mat side becomes an aluminum surface and it is used as a thermal insulation material (due to low absorption rate of infrared ray) · The light side becomes polyester of aluminum vapor deposition, and it is attached to a cold side (vacuum side).
		COOLCAT 4K: Available for sale from 20 m ²		
COOLCAT H	Matting material	150 mm width x 50 m roll	Single sided aluminum · laminate glass cross mat	<ul style="list-style-type: none"> · Weld protection mat made of aluminum foil and glass fiber cloth. · It is recommended to use it when welding SI of polyester material. (Polyester is flammable and burns in an environment of 250°C) · It can withstand high temperature of 150 °C or higher.
COOLCAT B-R50	Tape material	25 mm width x 50 m	Double-sided aluminum vapor deposition 25 μ polyester tape	<ul style="list-style-type: none"> · Tapes with low adhesive emissivity, ideal for use in cryogenic environments. · Polyester foil carrier of 25 μm + double-sided aluminum vapor deposition, high purity adhesive Acrylic manufactured as a material. · It is mainly used for cryogenic applications and can reduce the infrared emissivity of the outer surface. · We strongly recommend closing SI Joint. · Strength of cohesion Data are as follows. <ul style="list-style-type: none"> ■ Peeling Strength: Minimum 30N / Inch Width (AFERA 4001) ■ Shear Strength: Minimum 70 N / 625 m² · A product that meets the gas emission standard requirement required for the satellite of the European Space Agency. · Adhesive tape also sells tape dispensers wrapping detachable liners. · Selling one box (set) each.
		50 mm width x 50 m		

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