



Technical Data Sheet

3M™ VentureClad™ 1579GCWE-EMJ Insulation Jacketing Tape





English-US

Last Revision Date: May, 2024

Regulatory Info/SDS

Product Description

3M™ VentureClad™ Insulation Jacketing System is a heavy duty, zero permeability, all weather, multi-layered laminate coated with an aggressive cold weather acrylic adhesive. Excellent resistance to weathering, UV and extreme environmental conditions. Designed for use as a vapor barrier for insulation cladding and jacketing applications. Available in both flat and embossed.

Product Features

- Excellent adhesion in cold or hot and humid conditions
- Aggressive acrylic adhesive offers instant adhesion in temperatures as low as -10°F (-23°C)
- Zero permeability vapor barrier for insulation cladding and jacketing applications
 Reinforced for very high puncture and tear resistance to ensure long life and durability
- Flexible and strong
- Cuts and installs easily on-site, no special tools required

Technical Information Note

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Typical Physical Properties

Attribute Name	Test Method	Value	
Color		Silver	
Embossed		Yes	
Total Tape Thickness	ASTM D3652	.41 mm (16 mil)	
Puncture		252 N (57 lb)	
Water Vapor Transmission	ASTM E96	0 US Perms	

Typical Performance Characteristics

Attribute Name	Test Method	Dwell Time	Temperature	Test Condition	Value
180° Peel	ASTM D3330	1 min	22 °C (72 °F)		10.6 N/cm (100
Adhesion	ASTM D3330	1 min			oz/in) ¹
Tensile Strength AS	ASTM D882			Machine Direction	14.2 N/cm (130
					lb/in)

¹² in/min (300 mm/min)

Attribute Name	Value
Long Term Temperature Resistance	120 °C (248 °F) ¹
Minimum Long Term Temperature Resistance	-40 °C (-40 °F) ¹

¹ Long Term (day, weeks)

Typical Environmental Characteristics

Chemical and Environmental Exposure

Acids	Acetic acid (all concentrations) 50% formic acid	Resistant Resistant	
		Troolotant.	
	10% hydrochloric acid	Resistant	
	30% hydrochloric acid	Partially resistant	
	10% and 35% hydrofluoric acid	Resistant Resistant	
	10% nitric acid		
	65% and 100% nitric acid	Not resistant	
	30% and 85% phosphoric acid	Resistant	
	20% sulphuric acid	Partially resistant	
	Sulphur dioxide gas, dry	Resistant	
E 1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	80% and above sulphuric acid	Not resistant	
Aldehydes	Acetaldehyde	Resistant	
	Formaldehyde	Resistant	
Aqueous Alkaline Solutions	Ammonium hydroxide	Not resistant	
	Calcium hydroxide	Partially resistant	
	Sodium hydroxide	Not resistant	
Chlorinated Hydrocarbons	Carbon tetrachloride	Partially resistant	
	Chlorinated biphenyls	Partially resistant	
	Chloroform	Resistant	
	Trichloroethylene	Resistant	
Esters	Ethyl acetate	Resistant	
Hydrocarbons	Aliphatic hydrocarbons	Resistant	
	Benzene	Resistant	
	Gasoline (petrol)	Resistant	
	Mineral oils	Resistant	
	Toluene	Resistant	
	Xylene	Resistant	
Miscellaneous Substances	Chlorine	Resistant	
	Hydrogen peroxide	Resistant	
	Oxygen	Resistant	
	Water*	Resistant	
Other Organic Solutions	Acetone	Resistant	
o there organic conductions	Diethyl ether	Resistant	
	Nitrobenzene	Not resistant	
	Phenol	Not resistant	
Salt Solutions		Resistant	
Salt Solutions	Alkaline carbonates	Resistant	
Salt Solutions		Resistant	
Salt Solutions	Alkaline carbonates Bichromates Cyanides	0.000	

^{*}Chemical resistance info based in part on third party test data of the product backing.

Environmental Resistance

Excellent

Certifications/Standards

Certifications

	1579GCW-	15779GCWE-	1579GCW-	1579GCW-
Product	EMJ	EMJ	WM	WME
ASTM E84 Flame/Smoke Rating	10/50		20/25	20/25
UL723 Classified Flame/Smoke Rating (UL file #R10984)				
CAN/ULC S102 Classification Flame/Smoke Rating			25/25	
Meets FDA Compositional requirements for indirect food contact (21 CFR 175.105 and 21 CFR 175.125; FDA: Indirect Food Additives: Adhesives and Components of coatings)	х	х	х	х
Agency for use in food processing facilities as vapor barrier for insulation cladding and jacketing	х	x	Х	х
Contains Mold Inhibiting Agents	X	Х		
Passes ASTM C1338 Fungi Resistance Testing	X	х	Х	x
U.S. Coast Guard Approval	X	Х	X	X
IMO Resolution A653 (16)	X	х	Х	Х
IMO Resolution MSC61 (67) Annex 2 IMO Resolution MSC 61 (67) Annex 1 Part 2 and Annex 2	х	х	Х	х
BS476 parts 6 & 7 Class "O"			X	X

Storage and Shelf Life

Store in a clean, dry place. Temperature of 40-80°F (4-26°C) and 40 to 50% relative humidity are recommended. To obtain best performance, use this product within 24 months from date of manufacture.

Information

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ISO Statement

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