

CleanBond™ LOW VOC Double Coated Tape

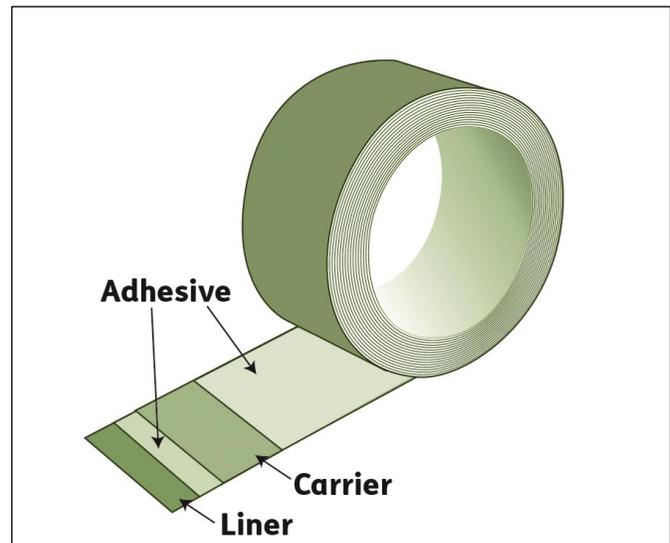
Version: 2
Date: 5/2019
Approved by: JNP

Product Description

CB4181 consists of a .5mil PET carrier coated on both sides with 1.8 mils of clean, aggressive acrylic pressure sensitive adhesive. The adhesive is protected by either a two-side silicone coated 80# natural polycoated Kraft liner or a 72# White polycoated liner. This product is designed for applications that benefit from a clean, chemically inert adhesive tape

Product Construction

- **Carrier:** 0.5 mil PET
- **Adhesive:** 1.8 mils LV820 LOW VOC Acrylic
- **Liner:** 80# Natural PCK or 72# White PCK
- **Web Width:** 54"



Features

- Low VOC – JIS A-1901
- Low FOG - VDA278, SAE J1756
- ISO 18916 Approved
- Aggressive acrylic adhesive
- Good shear properties
- Moisture stable PCK liners

Benefits

- Acid free, PH Neutral
- Non-outgassing and non-migratory
- Smooth adhesive profile
- Excellent adhesion to a wide variety of surfaces.
- Chemical & UV resistant
- Excellent handling and die-cutting.
- Non-corrosive & non-oxidizing

Applications

- Insulation and Shielding
- Wire harnessing
- Foam bonding applications
- Interior applications that require low VOC and low FOG characteristics
- Flexible Printed Circuits
- Printed Circuit Boards
- Archiving, photo mounting

CB4181 Physical Properties			
Thickness	Mils CB4181-80	Mils CB4181-72	
Adhesive	1.8/1.8	1.8/1.8	
Carrier	0.5	0.5	
Liner	6.1	5.8	
Total Thickness	10.2	9.9	
Performance Test	Test Method	Typical Values	
Loop tack	PSTC-16-Method A	Lbs./in.	Oz/in.
Stainless Steel	Backed with 2 mil PET	6.4	102.4
Peel Adhesion - 180° 2 mil PET Backed	PSTC-101-Method A	Lbs./in.	Oz/in.
30 minute dwell	Stainless Steel	8.5	136
24 hour dwell	Stainless Steel	9.9	158
30 minute dwell	ABS	7.9	126
30 minute dwell	Polycarbonate	8.3	133
30 minute dwell	HDPE	2.9	46
Peel Adhesion - 180° 2 mil dead soft aluminum foil	PSTC-101-Method A	Lbs./in.	Oz/in.
30 minute dwell	Stainless Steel	11.1	178
30 minute dwell	Polypropylene	2.9	46
Shear	PSTC-107-Method A	Hours to Fail	
1 kg weight	72°F	85+	
5 lb weight	72°F	6	
Tensile	ASTM-D882	Lbs./in.	Oz./in.
MD/CD		10	160
Elongation	ASTM-D882	%	
MD		100	

Values given are typical and not for use in specification

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Foam Bonding Performance		
Substrate	Application Method	Result
EPDM	Room Temp with 50% compression	Foam Destruction
Nitrile PVC	Room Temp with 50% compression	Foam Destruction
EVA Blend	Room Temp with 50% compression	Foam Destruction
Polyether polyurethane Foam	Room Temp with 50% compression	Foam Destruction
NBR-PVC	Room Temp with 50% compression	Foam Destruction

VOC Analysis Method: JIS-A 1801		
Substance	Values not to exceed [$\mu\text{g}/\text{m}^3$]	CB4181
Formaldehyde	100	0.4
Acetaldehyde	48	1.2
Toluene	260	*
Xylenes	870	1.4
p-Dichlorobenzene	240	*
Ethylbenzene	3800	*
Styrene	220	*
Chlorpyrifos	1	*
Di-2-ethylhexyl phthalate	120	*
Diazinon	.29	*
Nonanal	41	*
Fenobucarb	33	*

* Below Detection Limits

Fog Analysis Method: VDA278	Specification Requirements [$\mu\text{g}/\text{g}$]	CB4181
FOG	< 250	30
Fog Analysis Method: SAE J1756	Specification Requirements Gravimetric Fog, mg	CF4084
FOG		0.11

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SERVICE TEMPERATURE

Application: Above 50°F (10°C) for best performance
End Use: -40°F to 300°F (-40°C to 121°C) depending on laminate construction and end use application

APPLICATION DETAILS

For best performance surfaces must be clean, dry and free of any oil, grease or other contaminant.

SHELF LIFE

Two year shelf life when stored at 75°F. (24°C.) and 50% relative humidity or less. It is recommended that the product be stored in its original package until ready to use.

CALL **1-800-328-2619** for additional product information

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