

CB4181-80 Double Coated Tape

CleanBond™ LOW VOC Adhesive

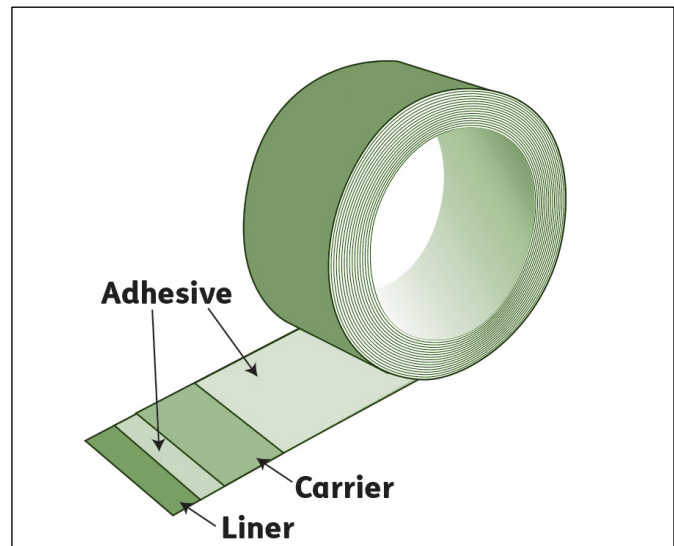
Version: 3
Date: 10/2023
Approved by: SRS

Product Description

CB4181-80 consists of a .5mil PET carrier coated on both sides with 1.8 mils of a clean non-VOC, low-outgassing and low-migratory aggressive acrylic pressure sensitive adhesive. The adhesive is protected by a two-side silicone 80# natural 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
- **Web Width:** 54"



Features

- Low VOC –JIS A-1901
- Low FOG - VDA278
- ISO 18916 Approved
- Aggressive Acrylic Adhesive
- High Dielectric Strength
- Moisture Stable PCK Liner

Benefits

- 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

- Flexible Printed Circuits
- Printed Circuit Boards
- Insulation and Shielding
- Wire harnessing
- Thermal Interface Materials
- Foam bonding applications
- Interior applications that require low VOC and low FOG characteristics

CB4181-80 Physical Properties			
Thickness	Mils CB4181-80		
Adhesive	1.8/1.8		
Carrier	0.5		
Liner	6.1		
Total Thickness	10.2		
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
Dielectric Strength	ASTM D 149-20	kV/mm	
Peak Voltage		41.3	
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

IMPORTANT NOTICE: The information given and recommendations made herein are based on our research and are believed to be accurate. In every case, user shall determine before using any product in full scale production, whether such product is suitable for their particular purpose under their own operating conditions. User assumes all risk and liability whatsoever in connection with their use of any product. The products discussed herein are sold without any warranty as to merchantability or any other warranty, expressed or implied. No representative of ours has any authority to waive or change the foregoing provisions unless in a specific agreement signed by the officers of seller and manufacturer. Ultimately, sellers and manufacturers only obligation shall be to replace or credit such quantity of the product proved to be defective at its discretion.

™ Trademark of Morgan Adhesives Company LLC

® Registered Trademark of Morgan Adhesives Company LLC

www.Mactac.com



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 [$\mu\text{g}/\text{m}^3$]	CB4181-80
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 [$\mu\text{g}/\text{g}$]	CB4181-80
FOG	< 250	30

Fog Analysis Method: SAE J1756	Specification Requirements Gravimetric Fog, mg	CB4181-80
FOG		0.11

- Custom liners, thicknesses, and widths available upon request

IMPORTANT NOTICE: The information given and recommendations made herein are based on our research and are believed to be accurate. In every case, user shall determine before using any product in full scale production, whether such product is suitable for their particular purpose under their own operating conditions. User assumes all risk and liability whatsoever in connection with their use of any product. The products discussed herein are sold without any warranty as to merchantability or any other warranty, expressed or implied. No representative of ours has any authority to waive or change the foregoing provisions unless in a specific agreement signed by the officers of seller and manufacturer. Ultimately, sellers and manufacturers only obligation shall be to replace or credit such quantity of the product proved to be defective at its discretion.

™ Trademark of Morgan Adhesives Company LLC
 ® Registered Trademark of Morgan Adhesives Company LLC
www.Mactac.com



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

IMPORTANT NOTICE: The information given and recommendations made herein are based on our research and are believed to be accurate. In every case, user shall determine before using any product in full scale production, whether such product is suitable for their particular purpose under their own operating conditions. User assumes all risk and liability whatsoever in connection with their use of any product. The products discussed herein are sold without any warranty as to merchantability or any other warranty, expressed or implied. No representative of ours has any authority to waive or change the foregoing provisions unless in a specific agreement signed by the officers of seller and manufacturer. Ultimately, sellers and manufacturers only obligation shall be to replace or credit such quantity of the product proved to be defective at its discretion.

™ Trademark of Morgan Adhesives Company LLC
® Registered Trademark of Morgan Adhesives Company LLC
www.Mactac.com

