



ACE 56153™

DEFINITION

ACE-56153™, a two component low viscosity, room temperature curing, high strength, gap filling, silver-filled epoxy adhesive, that has been formulated to meet the demanding requirement of Federal Specification, MMM-A-1931 (9/19/75), Type I. **ACE-56153™** cures to specification in 24 hours at 22±1°C. **ACE-56153™**, when cured at elevated temperature, or for longer times at room temperature, display volume resistivity values 10 to 100 times lower than those required by the specification. **ACE-56153™** has a light paste consistency that allows for dispensing by pneumatic dispensers, it is available in mixer packs for field applications and in bulk or in premixed and frozen packages.

PRODUCT DESCRIPTION

Appearance	Viscous liquid
Odor	Faint
Color	Silver gray

Other information						
Pot life time @ 25± 2°C	>1-2 hours					
Possible curing cycles	<ul style="list-style-type: none"> • 24 hours @ 22±1°C • 15 minutes @ 125°C 					
Volume Resistivity, Cured 24Hours @ 22±1°C	<0.01 Ω-cm	ASTM D257				
Mix Ratio:	By weight:	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>Part A</td> <td>Part B</td> </tr> <tr> <td>100</td> <td>7.5 ± 0.3</td> </tr> </table>	Part A	Part B	100	7.5 ± 0.3
Part A	Part B					
100	7.5 ± 0.3					
Shelf Life	One year in original unopened containers.					

APPLICATION PROPERTIES

- The materials are ideally suited for applications such as:
 - Knitted Wire Mesh
 - EMI Gasket Bonding
 - Low Current Circuit Board Conductors
 - Conductive Plastic Bonding
 - Conductive Bonding Of Dissimilar Substrates
 - Static Discharger Bonding
 - Aircraft EMI Caulking



APPLICATION RECOMMENDATIONS

- No thinner is recommended for **ACE-56153**; the material should be applied mixed, degassed, and undiluted.
- ACE-56153TM must be used within 60 minutes after addition and mixing of Part B to Part A.

TYPICAL PROPERTIES OF CURED ACE-56153TM

The properties listed below were determined from measurements carried out in a limited number of tests after curing **ACE-56153TM** for 24 hours at 25°C. These properties are given as guidance, and do not constitute a guarantee. It will be for the user, in all cases, to carry out their own tests to determine whether **ACE-56153TM** is suitable for the user's particular application.

Property	Result		Methods
Tensile Shear Strength	Test Temp	Lap Shear	ASTM-D-1002 Surface Prep: ASTM-D-2651, Method B
	-50°C	>1200 psi	
	25°C	>1200 psi	
	60°C	>1200psi	
Volume Resistivity, Ω-cm	Cure	Ω-cm	ASTM D257
	24Hrs @ 22±1°C	0.007	
	7 days @ 22±1°C	0.003	
	3 wks @ 22±1°C	0.001	
	15 min @ 125°C	0.0003	
Sag Flow	<0.5 inch		ASTM D2471
NASA Outgassing, Cured 24Hrs @ 22±1°C	0.39 %TML 0.01% CVCM 0.28% WVR		ASTM 595
NASA Outgassing, Cured 60 min @ 160°C	0.29 %TML 0.01% CVCM 0.14% WVR		



PRECAUTIONS IN USE

Refer to the attached material safety data sheet.

PACKAGING

Contact Protaviv America for specific packaging requirements.

The information contained in this data sheet corresponds to the present state of our knowledge; it is intended for your guidance but we are not bound by it since we are not in a position to exercise control over the manner in which our products are used. Moreover, the attention of the user is drawn to the risks that could possibly occur should a product be used for an application other than that for which it is intended.