



Technical Process Bulletin

LOCTITE EA 9897 0.033WPP AERO

Composite Surfacing Media

(KNOWN AS Hysol EA 9897 PEEL PLY)

INTRODUCTION

LOCTITE EA 9897WPP AERO is a pre-impregnated polyester peel ply product supplied in film form. It is a specially designed resin system capable of curing at 350°F/177°C. It is compatible with state-of-the-art composite prepreg resin systems and provides minimal residual peel ply fibers at the surface after curing and removal. No further processing steps are required prior to paint operations, thus eliminating the need for sand and solvent wipe operations.

FEATURES

- Greater durability over the life of the production article lowers repair costs, widens design abilities
- Minimal residual polyester fibers left on substrate after removal
- Eliminates contamination of Paint surface by residual fibers
- Provides a consistent Paint surface
- Compatible with third generation composites
- Broadens shop processing conditions, No sanding or solvent wiping required for Painting surface
- Minimizes surface preparation time and is ergonomically friendly
- Reduces cost of use
- Minimal force required to remove peel ply layer
 - Reduces shop time for fabric removal
 - Fabric strips easily in one piece
- Cures at 350°F/177°C, consistent with current composite cure parameters
- Long Out-time, 14 days minimum at 77°F/25°C
- Lowers handling and storage costs

Product Detail

Product Form	One-part film
Product Color	Neutral-off white
Support Carrier	Polyester peel ply
Roll Dimensions	Nominal 3 ft wide by 167 lineal ft (1 m wide by 50.9 m long)

Application

Storage Life - This product requires refrigerated storage. Store @ 0°F/-18°C or below for maximum storage life. Warranty life @ 0°F/-18°C is 12 months from date of shipment. Store only in sealed containers to prevent moisture contamination. Allow all moisture to evaporate before opening for use.

Open Assembly Time - This adhesive may be used within the following schedule after removing from cold storage:

- @ 77°F/25°C at least 14 days
- @ 90°F/32°C at least 10 days





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Applying - Tool surface should be clean, dry and properly prepared. LOCTITE EA 9897 WPP AERO, with one liner left on it, may be tacked to the tool. The liner should remain with the product until just before assembly of the composite prepreg. This will minimize contamination of the bond joint.

Curing - This product may be cured for 90 to 120 minutes at 350°F/177°C. Heat-up rate to the cure temperature is not critical, but should be between 1-10°F/0.6-6°C per minute. Pressure should be applied before heating the parts to be bonded and maintained until cool down of the assembly.

Cleanup - It is important to remove excess material from the part and bonding tools prior to curing. Uncured product may be trimmed and removed with a sharp object. Residual resin may be removed with denatured alcohol or many common industrial solvents. Be careful to prevent any solvent from entering the uncured bondline, as solvent will degrade the final performance. Consult with your supplier's information pertaining to the safe and proper use of solvents.

Removal - Remove LOCTITE EA 9897 WPP AERO just prior to secondary bond operation of composite detail. Starting at one corner, slowly and consistently, peel the LOCTITE EA 9897 WPP AERO away from the part. Peeling in a diagonal (to peel ply yarn) direction seems to facilitate removal. After completely removing the LOCTITE EA 9897 WPP AERO, continue immediately with paint process. LOCTITE EA 9897 WPP AERO peels cleanly from the composite surface leaving no polyester residue on the surface and results in excellent paint adhesion performance.

Bond Strength Performance

Areal Weight	0.033 lb/ft ² (161 g/m ²)
Volatiles at 350°F/177°C	<1%
Resin Content	48%
Composite Single Slotted Lap Shear	4785 lb/in ² (33.0 MPa)
Composite Interlaminar Fracture Toughness	911 J/m ²





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Peel and Paint Demo Panel





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Handling Precautions

Do not handle or use until the Material Safety Data Sheet has been read and understood. For industrial use only.

DISPOSAL INFORMATION

Dispose of spent remover and paint residue per local, state and regional regulations. Refer to HENKEL TECHNOLOGIES MATERIAL SAFETY DATA SHEET for additional disposal information.

PRECAUTIONARY INFORMATION

General:

As with most epoxy based systems, use this product with adequate ventilation. Do not get in eyes or on skin. Avoid breathing the vapors. Wash thoroughly with soap and water after handling.

Before using this product refer to container label and HENKEL TECHNOLOGIES MATERIAL SAFETY DATA SHEET for additional precautionary, handling and first aid information.

Note

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