

LOCTITE EF 9840 AERO

Expanding Syntactic Film

(KNOWN AS SynSpand[®] EA 9840)

INTRODUCTION

LOCTITE EF 9840 AERO is an expanding modified epoxy film that is supplied as a continuous film of controlled areal weight and width. It may be cured at 300°F (149°C). Commonly used for Abradable seals, which require high abrasion and corrosion resistance.

FEATURES

- Typical Cured Density: 25±2 lb/ft³ (0.40±0.03 g/cm³)
- Erosion Resistance
- Moisture Resistance
- Environmental resistance
- Consolidation pressures 40-100 psi (2.8-6.9 bar) for closed mold processing
- Mold to Net Shape
- Compatible Repair Paste is LOCTITE EA 9891RP AERO

Product Form

- 12" x 24" (305 mm x 610 mm) sheets - 20 sheets per box
- Uncured thickness 0.050" (1.27 mm) nominal
- Areal Weight 0.23 lb/ft² (1.12 kg/m²) nominal

Handling

Store @ 0°F (-18°C)

This product is in sheet film form and is ready to use as received. Material should be removed from cold storage and allowed to warm to room temperature before removing the protective packaging. This material has protective liners on it which must be removed prior to parts assembly (see "Applying" below). The liners will always be a contrasting color from the material to allow the user easy confirmation of removal.

Warranty Life - Product requires refrigerated storage. Store @ 0°F (-18°C) or below for maximum storage life. Warranted life @ 0°F (-18°C) or below is 12 months. Store in sealed desiccated MIL B 131 H Class 1 Type 1 bag provided. Allow adequate time for the container to warm to room temperature before opening for use.

Applying - Product is a pliable film with tack and drape. Product can be cut to any desired shape using ordinary razor knives or scissors. Razor knives using templates as guides work best. After cutting the material you can remove the polyethylene release film by peeling back from a corner.



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Open Assembly Time - Product must be used within the following schedule after removing from cold storage:
@ 77°F (25°C) - 15 days
@ 90°F (32°C) - 5 days

Curing - Cure is accomplished in 90 minutes @ 300°F (149°C). Recommended heat-up rate is ≥5°F/minute (3°C/minute).

Typical Performance Properties

ASTM G-76 Erosion Test Data

Test Temperature : 75°F(25°C) Particle Velocity: 30 m/sec
Material Density: 0.648 g/cm³ Particle Feed Rate: 2 g/m
Material Size: 1"x1"x0.5" nominal Impingement Angle: 45°

Initial Weight (grams)	Final Weight (grams)	Exposure Time (sec)	Total Exposure Time (sec)	Specimen Weight Change (grams)	Total Change (grams)	Specimen Volume Loss (cm ³)	Total Loss (cm ³)	Total Abrasive Used (grams)	Erosion Rate (mm ³ /g)
4.9923	4.9918	30	150	0.0005	0.0028	0.00085	0.00221	5.0	0.85179

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.





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Rev. 9/2013

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