

3M™ Edge Sealer ES2000

Technical Data Sheet

Product Description

3M™ Edge Sealer ES2000 is a two-part, urethane sealer. It is a clear, non-yellowing, durable sealer system having excellent resistance to environmental exposure. It is supplied in 50 ml dual syringe plastic Duo-Pak cartridges with a 1:1 mix ratio as part of the 3M™ Applicator System.

3M Edge Sealer ES2000:

- Has excellent environmental resistance properties and has been used to protect exposed edges from environmental damage.
- Adheres to a variety of surfaces including paints, primers and films.
- Cures to provide a clear, non-yellowing, high gloss finish at ambient conditions.
- Has been used to provide protection for exposed edges on aircraft, wind generators and ships.
- Polyol/Polyisocyanate system results in 100% solids.
- Supplied in convenient 50 ml Duo-Pak Cartridges for easy application of large or small amounts with minimal waste.

Typical Physical Properties and Performance Characteristics

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes. **ASTM = American Society for Testing and Materials.**

PROPERTY	TEST METHOD	TYPICAL VALUE
Color	Visual	Clear
Viscosity Part A* Part B**	ASTM D2196	30,000 - 40,000 cps 1,000 - 5,000 cps
Solids Content		100%
Shore Hardness C After 24 hrs After 48 hrs	ASTM D2240	64 68
Tack Free Time	ASTM D5895	25 minutes
Yellowness Index	ASTM E313	0.3
Yellowness Index after exposure to 1000 hrs according to ASTM G-155 Cycle 1	ASTM E313	2.3

*Brookfield RVF, No. 3 Spindle @ 1 RPM @ 25°C.

**Brookfield RVF, No. 3 Spindle @ 10 RPM @ 25°C.

Directions for Use

Surface Preparation:

For best adhesion, oxide films, oils, dust, mold release agents and all other surface contaminants must be completely removed.

Dispensing:

3M™ Edge Sealer ES2000 is packaged in Duo-Pak cartridges as part of the 3M™ Scotch-Weld™ EPX™ Applicator System. Follow the applicator instructions for assembly, cartridge loading and dispensing the sealer. Make sure you select the correct Applicator Plunger for the selected sealer. After loading the Duo-Pak cartridge into the EPX applicator, remove the cartridge cap and apply the nozzle to the cartridge. To ensure adequate mixing and to minimize air entrapment in the nozzle, point the nozzle end of the loaded Duo-Pak cartridge in a vertical upward position and slowly expel sealant from the cartridge into the nozzle. Once sealant has reached the tip of the nozzle, expel sealant until no air bubbles are present. Apply sealant to the desired surface/edge using desired position. Properly applied sealant should be transparent with minimal air entrapment.

Once Part A and Part B of the sealant materials come in contact with each other, the sealant begins to cure. Depending on the time and temperature, the sealant can set up within the nozzle if it is not dispensed within the working time of the sealant. If after a long idle time, the sealant will not flow, remove and replace the mixing nozzle. For idle times less than the set up time of the sealant, a good practice is to leave the mixing nozzle on the tube until the next time it is used. This will prevent cross contamination of Parts A and B.

Hand Mixing:

Hand mixing is not recommended.

Clean-up:

Excess uncured sealant can be removed by wiping with solvent and should be allowed to cure before disposal. Unmixed sealant should be handled and stored per the SDS recommendation. Mixed sealant that has cured does not require special waste handling procedures. Dispose of gloves, tape and other items containing cured sealant accordingly. Gloves and tools that have been in contact with any unmixed sealant should be treated and disposed of per the SDS recommendation. Wash hands with soap and water.

Shelf Life and Storage Conditions

Store products at 60-80°F (16-27°C) for maximum storage life. Rotate stock on a “first-in first-out” basis.

When stored in the original, unopened container at the storage conditions suggested, these products have a shelf life of 24 months from date of manufacture.

Authorization to Use

Ensure products meet all applicable specifications, standards, and maintenance manual requirements for the platform being worked on and validate all aircraft approvals against current technical documentation.



Precautionary Information

Refer to Product Label and Safety Data Sheet (SDS) for health and safety information before using this product. Always wear personal protection equipment, such as half or full face piece air purifying respirator suitable for organic vapors and particulates. For additional health and safety information, please visit www.3m.com/MSDS or call 1-800-364-3577 or (651) 737-6501.

Additional Information

In the U.S. call toll free 1-800-235-2376, or fax 1-800-435-3082 or 651-737-2171. For U.S. Military, call 1-866-556-5714. If you are outside of the U.S., please contact your nearest 3M representative.

These products are manufactured under a 3M Quality Management System registered to the AS9100 standard

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