

Revision B
February 19, 2008



Attn:

Docket Management Facility
U.S. Department of Transportation
1200 New Jersey Avenue, S.E.
West Building Ground Floor
Room W12-14
Washington, D.C. 20590

Subject: Petition for an exemption to 14 CFR 25.853(a) for adhesive.
Petition for an exemption to 14 CFR 21.601(b)(2) for TSO-C72() cushion assemblies

Revision A: Added potential end users of Greiner's product.

Revision B: Updated petition for exemption to include 21.601(b)(2) for TSO-C72() cushion assemblies. This was previously addressed by a separate document.

References:

- 1) Exemption No. 6477 (Regulatory Docket No. 28487) granted to Custom Products, Inc for exemption from 25.853(a) of the Federal Aviation Administration for water-based adhesives
- 2) Exemption No. 6634C (Regulatory Docket No. FAA-2001-8860) granted to Franklin Products, Inc for exemption from 25.853(a) of the Federal Aviation Administration for water-based adhesives
- 3) Greiner Test Report FTP055 Rev. B, Adhesive Comparison.

Dear Sir or Madam:

Greiner PURtec respectfully requests an exemption from the vertical burn requirements of 14 CFR 25.853(a) for the water-based adhesive used in producing cushions for the commercial aircraft industry. Some of these cushions are flotation cushions capable of comprising part of TSO-C72() assemblies. Therefore, Greiner PURtec also respectfully requests an exemption to 14 CFR 21.601(b)(2) for TSO-C72() cushion assemblies containing this adhesive. Cushions constructed with this adhesive are unable to fulfill the TSO requirement of 14 CFR 25.853(a) as specified within 14 CFR 25.853(c). These cushions are capable of being installed on TSO-C127() & C39() aircraft seats manufactured by Brice Manufacturing., Recaro Aircraft Seating, & Weber Aircraft, among others. Similar exemptions for similar circumstances have previously been granted to other cushion suppliers (See Ref. 1 & 2).

Greiner PURtec changed to a water-based adhesive in January of 2007 (Simalfa 309) in the interest of complying with stricter environmental regulations imposed on solvent based adhesives. Greiner PURtec performed multiple 14 CFR 25.853(c) tests in order to qualify the use of this adhesive, selecting it out of a field of similar products based on producibility, potential effect on human health, and flammability compliance. The adhesive continues to produce passing test results for oil burn testing, which Greiner PURtec believes is a more critical test in regards to cushion flammability performance. Greiner PURtec believes that passing the 14 CFR 25.853(c) test for a cushion assembly can be used to show an equivalent or greater level of flammability compliance for a cushion assembly when compared to a 14 CFR 25.853(a) test of subassemblies or individual components of the cushion. The oil burn tests performed on cushion assemblies using the water-based adhesive do not show significantly different results than those from our previous solvent-based adhesive. (See Ref. 3)

Greiner PURtec is actively pursuing qualification of a water-based adhesive with our current adhesive supplier which is capable of meeting the vertical burn requirements, however based on recent testing the product cannot yet meet all the criteria necessary to be implemented. Unfortunately, this adhesive cannot be finalized or implemented in short amount of time. However, since our goal is to find and use an adhesive which meets all the requirements, Greiner is asking for a time limited exemption of only three years for our current product.

Approval of the requested exemption would be in the public interest because:

- 1) Water-based adhesives are safe for both the environment and the people who work with them. The replacement of solvent-based adhesives is in the best interest of the public, due to potential adverse affects on both people exposed to the products and the environment
- 2) There is no readily available water-based adhesive which meets 14 CFR 25.853(a) requirements. Using the current water-based adhesive is the only alternative to stopping production until a compliant adhesive can be finalized. Stopping production would be a financial hardship to Greiner PURtec, our employees, and ultimately our customers, who have commitments to their own customers.
- 3) The water-based adhesive currently in use shows equal or marginally better performance in oil burn testing than the previously used solvent based adhesive. The safety of the flying public is not affected.

Greiner PURtec requests that this exemption be extended to our customers, either TSO organizations or owner/operators of Part 25 aircraft.

If additional information is required, please contact the undersigned.

Sincerely,



John W. Sparkman
Director of Quality & Certification