

Client: Tri-Peek International Ltd
Product: PEEK
Dilution: As received

Date: 22-Apr-2008
SMI/REF: 0802-214

BOEING D6-17487 REVISION P (*Exterior & General*)

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Acrylic Crazeing Test:

The material being tested shall not craze, crack, or etch acrylic test specimens when tested in accordance with ASTM F 484 using Type C (stretched acrylic plastic in accordance with MIL-P-25690) stressed to an outer fiber stress of 4500 psi.

Type C (MIL-P-25690): No crazing, cracking, or etching

Result Conforms

Paint Softening Test Procedure:

- a. Testing shall be in accordance with ASTM F502 using the following coating systems.
- (1) BMS 10-79, Type II primer applied in accordance with BAC 5882 plus BMS 10-60, Type II enamel in accordance with BAC 5845.
 - (2) BMS 10-79, Type III primer applied in accordance with BAC 5882, plus BMS 10-100 coating in accordance with BAC 5795.
- b. Three specimens conforming to Section 13a.(1) and three specimens conforming to Section 13a(2) shall be used for each test condition.
- c. The material being tested shall not produce a decrease in film hardness greater than two pencils, or any discoloration or staining.

NOTE: Slight darkening of the BMS 10-100 surface is acceptable.

As received:

Paint system 1: 0 pencil hardness change after 24 hour post-exposure dry time. No discoloration or staining.

Paint system 2: 0 pencil hardness change after 24 hour post-exposure dry time. Slight staining.

Result Conforms

Hydrogen Embrittlement Test:

Hydrogen Embrittlement testing shall be in accordance with ASTM F 519-93, using cadmium plated Type 1a, 1c, or 2a specimens. All requirements of ASTM F519-93 for specimens, preparation, testing, and reporting shall apply. Type 1a specimens shall meet the requirements of D6-4307.

Specimens: Type 1c, cadmium plated per MIL-STD-870 Type I Class 1. (45% load, 150 hours, notched immersed for the duration, room temp.)

**As received: #1: No failure occurred within 150 hours.
#2: No failure occurred within 150 hours.
#3: No failure occurred within 150 hours.
#4: No failure occurred within 150 hours.**

Result Conforms