§ 160.176–8 Materials.

(a) General—(1) Acceptance, certification, and quality. All components used in the construction of lifejackets must meet the requirements of subpart 164.019 of this chapter.

(2) Condition of materials. All materials must be new.

(3) Temperature range. Unless otherwise specified in standards incorporated by reference in this section, all materials must be usable in all weather conditions throughout a temperature range of −30 °C to +65 °C (−22 °F to +150 °F).

(d) Weathering resistance. Each non-metallic component which is not suitably covered to shield against ultraviolet exposure must retain at least 40% of its strength after being subjected to 300 hours of sunshine carbon arc weathering as specified by Method 5804.1 of Federal Test Method Standard Number 191A.

(5) Fungus resistance. Each non-metallic component must retain at least 90% of its strength after being subjected to the mildew resistance test specified by Method 5762 of Federal Test Method Standard No. 191A when untreated cotton is used as the control specimen. Also, the gas transmission rate of inflation chamber materials must not be increased by more than 10% after being subjected to this test. Materials that are covered when used in the lifejacket may be tested with the covering material.

(6) Corrosion resistance. Each metal component must—

(i) Be galvanically compatible with each other metal part in contact with it; and

(ii) Unless it is expendable (such as an inflation medium cartridge), be 410 stainless steel, have salt water and salt air corrosion characteristics equal or superior to 410 stainless steel, or perform its intended function and have no