

(D) Has shell and head thicknesses that have not decreased below the minimum value specified in the following table:

Packaging model	Minimum thickness; millimeters (inches)
1S, 2S	1.58 (0.062)
5A, 5B, 8A	3.17 (0.125)
12A, 12B	4.76 (0.187)
30B	7.93 (0.312)
48A, F, X, and Y	12.70 (0.500)
48T, O, OM, OM Allied, HX, H, and G ...	6.35 (0.250)

(3) Each package shall be designed so that it will:

(i) Withstand a hydraulic test at an internal pressure of at least 1.4 MPa (200 psig) without leakage;

(ii) Withstand the test specified in § 173.465(c) without loss or dispersal of the uranium hexafluoride; and

(iii) Withstand the test specified in 10 CFR 71.73(c)(4) without rupture of the containment system.

(4) Uranium hexafluoride must be in solid form.

(5) The volume of solid uranium hexafluoride, except solid depleted uranium hexafluoride, at 20 °C (68 °F) may not exceed 61% of the certified volumetric capacity of the packaging. The volume of solid depleted uranium hexafluoride at 20 °C (68 °F) may not exceed 62% of the certified volumetric capacity of the packaging.

(6) The pressure in the package at 20 °C (68 °F) must be less than 101.3 kPa (14.7 psia).

(b) Each packaging for uranium hexafluoride must be periodically inspected, tested, marked and otherwise conform with the American National Standard N14.1.

(c) Each repair to a packaging for uranium hexafluoride must be performed in accordance with the American National Standard N14.1.

(d) Uranium hexafluoride not exceeding the limits specified in the limited quantity package limits column of table 4 in § 173.425 may be classified as UN 3507, Uranium hexafluoride, radioactive material, excepted package, less than 0.1 kg (0.22 pounds) per package, non-fissile or fissile-excepted, provided that:

(1) The mass of uranium hexafluoride in the package is less than 0.1 kg (0.22 pounds); and

(2) The conditions of §§ 173.24, 173.24a, and 173.421(a) and (d) are met.

(e) For a package containing 0.1 kg or more of UF₆, the proper shipping name and UN number “Radioactive material, uranium hexafluoride, UN 2978” must be used for the transportation of non-fissile or fissile-excepted uranium hexafluoride and the proper shipping name and UN number “Radioactive material, uranium hexafluoride, fissile, UN 2977” must be used for the transport of fissile uranium hexafluoride.

[69 FR 3675, Jan. 26, 2004; 69 FR 55118, Sept. 13, 2004, as amended at 79 FR 40612, July 11, 2014; 80 FR 1162, Jan. 8, 2015; 80 FR 72928, Nov. 23, 2015]

§ 173.421 Excepted packages for limited quantities of Class 7 (radioactive) materials.

A Class 7 (radioactive) material with an activity per package which does not exceed the limited quantity package limits specified in Table 4 in § 173.425, and its packaging, are excepted from requirements in this subchapter for specification packaging, marking (except for the UN identification number marking requirement described in § 173.422(a)), labeling, and if not a hazardous substance or hazardous waste, shipping papers, and the requirements of this subpart if:

(a) Each package meets the general design requirements of § 173.410;

(b) The radiation level at any point on the external surface of the package does not exceed 0.005 mSv/h (0.5 mrem/h);

(c) The non-fixed contamination on the external surface of the package does not exceed the limits specified in § 173.443(a);

(d) The outside of the inner packaging or, if there is no inner packaging, the outside of the packaging itself bears the marking “Radioactive;”

(e) The package does not contain fissile material unless excepted by § 173.453; and

(f) The material is otherwise prepared for shipment as specified in accordance with § 173.422.

[79 FR 40613, July 11, 2014]