

(5) “Includes” is used as a word of inclusion not limitation.

[Amdt. 171–32, 41 FR 15996, Apr. 15, 1976, as amended by Amdt. 171–32A, 41 FR 40630, Sept. 20, 1976; Amdt. 171–121, 58 FR 51528, Oct. 1, 1993]

**§ 171.10 Units of measure.**

(a) *General.* To ensure compatibility with international transportation standards, most units of measure in this subchapter are expressed using the International System of Units (“SI” or metric). Where SI units appear, they are the regulatory standard. U.S. standard or customary units, which appear in parentheses following the SI

units, are for information only and are not intended to be the regulatory standard.

(b) Abbreviations for SI units of measure generally used throughout this subchapter are as shown in paragraph (c) of this section. Customary units shown throughout this subchapter are generally not abbreviated.

(c) *Conversion values.* (1) Conversion values are provided in the following table and are based on values provided in ASTM E 380–89, “Standard for Metric Practice.”

(2) If an exact conversion is needed, the following conversion table should be used.

TABLE OF CONVERSION FACTORS FOR SI UNITS

Measurement	SI to U.S. standard	U.S. standard to SI
Activity .....	1 TBq=27 Ci .....	1 Ci=0.037 TBq
Length .....	1 cm=0.3937008 in .....	1 in=2.540000 cm
	1 m=3.280840 ft .....	1 ft=0.3048000 m
Thickness .....	1 mm=0.03937008 in .....	1 in=25.40000 mm
Mass (weight) .....	1 kg=2.204622 lb .....	1 lb=0.4535924 kg
	1 g=0.03527397 oz .....	1 oz=28.34952 g
Pressure .....	1 kPa=0.1450377 psi .....	1 psi=6.894757 kPa
	1 Bar=100 kPa=14.504 psi .....	1 psi=0.06895 Bar
	1 kPa=7.5 mm Hg .....	
Radiation level .....	1 Sv/hr=100 rem/hr .....	1 rem/hr=0.01 Sv/hr
Volume (liquid) .....	1 L=0.2641720 gal .....	1 gal=3.785412 L
	1 mL=0.03381402 oz .....	1 oz=29.57353 mL
	1 m³=35.31466 ft³ .....	1 ft³=0.02831685 m³
Density .....	1 kg/m³=0.06242797 lb/ft³ .....	1 lb/ft³=16.01846 kg/m³
Force .....	1 Newton = 0.2248 Pound-force .....	1 Pound-force=4.483 N

Abbreviation for units of measure are as follows:  
 Unit of measure and abbreviation:  
 (SI): millimeter, mm; centimeter, cm; meter, m; gram, g; kilogram, kg; kiloPascal, kPa; liter, L; milliliter, mL; cubic meter, m³;  
 Terabecquerel, TBq; Gigabecquerel, GBq; millisievert, mSv; Newton, N;  
 (U.S.): Inch, in; foot, ft; ounce, oz; pound, lb; psig, psi; gallon, gal; cubic feet, ft³; Curie, Ci; millicurie, mCi; millirem, mrem.

[Amdt. 171–111, 56 FR 66159, Dec. 20, 1991, as amended by Amdt. 171–136, 60 FR 49108, Sept. 21, 1995; Amdt. 171–135, 60 FR 50302, Sept. 28, 1995; 66 FR 33335, June 21, 2001; 66 FR 45378, Aug. 28, 2001]

**§ 171.11 Use of ICAO Technical Instructions.**

Notwithstanding the requirements of parts 172 and 173 of this subchapter, a hazardous material may be transported by aircraft, and by motor vehicle either before or after being transported by aircraft, in accordance with the ICAO Technical Instructions (incorporated by reference, see § 171.7) if the hazardous material:

(a) Is packaged, marked, labeled, classified, described and certified on a shipping paper and otherwise in a condition for shipment as required by the ICAO Technical Instructions;

(b) Is within the quantity limits prescribed for transportation by either passenger-carrying or cargo aircraft, as appropriate, as specified in the ICAO Technical Instructions;

(c) Is not a forbidden material or package according to § 173.21 of this subchapter; is not a forbidden material as designated in Column (3) of the § 172.101 Table of this subchapter; and is not forbidden by Column 9(A) of the § 172.101 Table of this subchapter when transported on passenger aircraft, or is not forbidden by Column 9(B) of the § 172.101 Table of this subchapter when transported by cargo aircraft.