

trailership includes *Roll-on/Roll-off (RO/RO)* vessels.

Train means one or more engines coupled with one or more rail cars, except during switching operations or where the operation is that of classifying and assembling rail cars within a railroad yard for the purpose of making or breaking up trains.

Trainship means a vessel other than a rail car ferry or carfloat, specifically equipped to transport railroad vehicles, and fitted with installed securing devices to tie down each vehicle.

Transport vehicle means a cargo-carrying vehicle such as an automobile, van, tractor, truck, semitrailer, tank car or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, rail car, etc.) is a separate transport vehicle.

UFC means Uniform Freight Classification.

UN means United Nations.

UN portable tank means a intermodal tank having a capacity of more than 450 liters (118.9 gallons). It includes a shell fitted with service equipment and structural equipment, including stabilizing members external to the shell and skids, mountings or accessories to facilitate mechanical handling. A UN portable tank must be capable of being filled and discharged without the removal of its structural equipment and must be capable of being lifted when full. Cargo tanks, rail tank car tanks, non-metallic tanks, non-specification tanks, bulk bins, and IBCs and packagings made to cylinder specifications are not UN portable tanks.

UN Recommendations means the UN Recommendations on the Transport of Dangerous Goods.

UN standard packaging means a packaging conforming to standards in the UN Recommendations.

Unit load device means any type of freight container, aircraft container, aircraft pallet with a net, or aircraft pallet with a net over an igloo.

United States means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, the Virgin Islands, American Samoa, Guam, or any other territory or possession of the United States designated by the Secretary.

Vessel includes every description of watercraft, used or capable of being used as a means of transportation on the water.

Viscous liquid means a liquid material which has a measured viscosity in excess of 2500 centistokes at 25 °C. (77 °F.) when determined in accordance with the procedures specified in ASTM Method D 445-72 "Kinematic Viscosity of Transparent and Opaque Liquids (and the Calculation of Dynamic Viscosity)" or ASTM Method D 1200-70 "Viscosity of Paints, Varnishes, and Lacquers by Ford Viscosity Cup."

Volatility refers to the relative rate of evaporation of materials to assume the vapor state.

Water reactive material. See §173.124(c) of this subchapter.

Water resistant means having a degree of resistance to permeability by and damage caused by water in liquid form.

Wooden barrel means a packaging made of natural wood, of round cross-section, having convex walls, consisting of staves and heads and fitted with hoops.

W.T. means watertight.

[Amdt. 171-32, 41 FR 15994, Apr. 15, 1976]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §171.8, see the List of CFR Sections Affected which appears in the Finding Aids section of the printed volume and on GPO Access.

§171.9 Rules of construction.

(a) In this subchapter, unless the context requires otherwise:

- (1) Words imparting the singular include the plural;
- (2) Words imparting the plural include the singular; and
- (3) Words imparting the masculine gender include the feminine;

(b) In this subchapter, the word: (1) "Shall" is used in an imperative sense;

(2) "Must" is used in an imperative sense;

(3) "Should" is used in a recommendatory sense;

(4) "May" is used in a permissive sense to state authority or permission to do the act described, and the words "no person may * * *" or "a person may not * * *" means that no person is required, authorized, or permitted to do the act described; and

(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 m ³ =35.31466 ft ³	1 ft ³ =0.02831685 m ³
Density	1 kg/m ³ =0.06242797 lb/ft ³	1 lb/ft ³ =16.01846 kg/m ³
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.