

Hazardous Materials Carried By Passengers & Crewmembers

In general, Federal regulations prohibit passengers and crewmembers from carrying hazardous materials aboard the aircraft. Below is a chart detailing the exceptions in 49 CFR, section 175.10, that allow passengers and crewmembers to carry *some* personal hazardous materials. Though allowable by Federal regulations, the exceptions listed here should not be interpreted as a mandate to an air carrier to allow these materials to be carried by passengers or crew. Air carriers and other nations may have more restrictive policies than what is listed here. An asterisk "*" on this chart indicates that an item is frequently subject to greater restrictions (or prohibited) by airlines and other nations.

Passenger Hazmat Exceptions	Allowed	Not Allowed	49 CFR Regulatory Text That Allows It
<p>Non-radioactive medicinal and toilet articles (including flammable and nonflammable aerosols)</p> <p>Additional nonflammable, non-toxic aerosols in checked baggage (Nonflammable aerosols are rare)</p> <p>One self-defense spray (mace, pepper spray) in checked baggage *</p>	<p>✔ Toilet or medicinal articles that are hazardous materials such as rubbing alcohol, flammable perfumes & cologne, nail polish remover and aerosols (hair spray, shaving cream, etc.).</p> <div style="text-align: center;">  </div> <p>✔ Non-toiletry aerosols that contain nonflammable & non-toxic gas in checked baggage only.</p> <div style="text-align: center;">  </div> <p>✔ One small self-defense spray may be in checked baggage only.</p> <div style="text-align: center;">  </div>	<p>✗ Hazardous materials that are not toiletries or described in the other exceptions, such as: spray paints, aerosol laundry starch, insecticides, corrosive drain cleaners, etc.</p> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div>	<p>175.10(a)(4) The following hazardous materials when carried by a passenger or crew member for personal use in conformance with the following conditions:</p> <p>(i) Non-radioactive medicinal or toilet articles (including aerosols) may be carried in checked or carry-on baggage;</p> <p>(ii) One self-defense spray (see 171.8) not exceeding 118 mL (4 fluid ounces) by volume, that incorporates a positive means to prevent accidental discharge may be carried in checked baggage only;</p> <p>(iii) Other aerosols in Division 2.2, with no subsidiary risk, may be carried in checked baggage only; and</p> <p>(iv) The aggregate quantity of hazardous materials carried by the person may not exceed 2 kg (70 ounces) by mass or 2 L (68 fluid ounces) by volume and the capacity of each container may not exceed 0.5 kg (18 ounces) by mass or 470 mL (16 fluid ounces) by volume.</p> <p>(v) The provisions of this paragraph (a)(4) also apply to an aircraft operator when transporting passenger or crew member baggage to its intended destination, if the baggage has been separated from the passenger or crew member, including transfer to another carrier for transport to its intended destination.</p>

Passenger Hazmat Exceptions	Allowed	Not Allowed	49 CFR Regulatory Text That Allows It
<p>Small arms ammunition * –ammunition that is: (1) Ammunition for rifle pistol, or shotgun; (2) Ammunition with inert projectile or blank ammunition; (3) Ammunition not exceeding 50 caliber for rifle or pistol cartridges or 8 gauge for shotgun shells; (4) And not a forbidden explosive under 49 CFR 173.54.</p>	<p>✔ Small arms ammunition for personal use carried by a passenger or crew member in <u>checked baggage</u> if securely packed in fiber, wood or metal boxes or other packaging specifically designed to carry small amounts of ammunition.</p>  <p>No set quantity limit other than “personal use.” *</p>	<p>✘ All other ammunition not meeting the definition of small arms or not securely packed as required.</p>  <p>✘ Loaded firearms. ✘ Ammunition in carry-on baggage.</p>	<p>175.10(a)(5) Small arms ammunition for personal use carried by a crewmember or passenger in his baggage (excluding carry-on baggage) if securely packed in fiber, wood or metal boxes, or other packaging specifically designed to carry small amounts of ammunition. This paragraph does not apply to persons traveling under the provisions of 49 CFR 1544.219.</p>
<p>Oxygen for medical use by a passenger during flight</p>	<p>✔ Oxygen, or any hazardous material used for the generation of oxygen, <u>which is furnished by the aircraft operator</u>.</p> <p><i>Passengers may carry their own oxygen equipment through the security screening checkpoint for use at the airport gate area. This equipment, however, must not be carried aboard the aircraft.</i></p>	<p>✘ Passengers may not carry or use their own oxygen cylinders during the flight. ✘ Passengers may not carry their own oxygen generating equipment or canisters.</p>	<p>175.10(a)(7) Oxygen or any hazardous material used for the generation of oxygen, for medical use by a passenger, which is furnished by the aircraft operator in accordance with 14 CFR 121.574 or 135.91. For purposes of this paragraph, an aircraft operator that is not a certificate holder under 14 CFR part 121 or part 135 may apply this exception in conformance with 14 CFR 121.574 or 135.91 in the same manner as required for a certificate holder.</p>
<p>Heart pacemakers or other devices and radiopharmaceuticals contained within the body</p>	<p>✔ Pacemakers or similar implanted devices and radiopharmaceuticals contained within the body.</p>		<p>175.10(a)(8) Human beings and animals with an implanted medical device, such as a heart pacemaker, that contains Class 7 (radioactive) materials or with radio-pharmaceuticals that have been injected or ingested.</p>

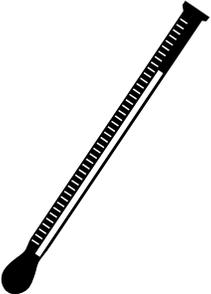
Passenger Hazmat Exceptions	Allowed	Not Allowed	49 CFR Regulatory Text That Allows It
<p>Lighters</p> <p>Safety matches</p>	<p>✔ Safety matches or a lighter (liquefied gas, or, liquid contained in an absorbent within the lighter), <u>carried on one's person</u> (includes carry-on baggage*).</p> <p>Bic-type lighter</p>  <p>Zippo-type lighter</p>  	<p>✘ Strike anywhere matches, lighter refills, and lighters with unabsorbed liquid fuel.</p>   <p>✘ Any lighters or matches in checked baggage.</p>	<p>175.10(a)(10) Safety matches or a lighter intended for use by an individual when carried on one's person. However, lighters containing unabsorbed liquid fuel (other than liquefied gas), lighter fuel, and lighter refills are not permitted on one's person or in checked or carry-on baggage.</p>
<p>Dry Ice</p>	<p>✔ Small amounts of dry ice used as a refrigerant. Package must allow the release of carbon dioxide gas (no airtight packages).</p> 		<p>175.10(a)(13) Carbon dioxide, solid (dry ice) when:</p> <ul style="list-style-type: none"> (i) In quantities not exceeding 2.3 kg (5.07 pounds) per package packed as prescribed by 173.217 of this subchapter and used as a refrigerant for the contents of the package. The package must be marked with the name of the contents being cooled, the net weight of the dry ice or an indication that the net weight is 2.3 kg (5.07 pounds) or less, and also marked "Carbon Dioxide, Solid" or "Dry Ice"; (ii) Intended for use in food and beverage service aboard aircraft; or (iii) In quantities not exceeding 2 kg (4.4 pounds) per passenger when used to pack perishables in carry-on baggage provided the package permits the release of carbon dioxide gas.

Passenger Hazmat Exceptions	Allowed	Not Allowed	49 CFR Regulatory Text That Allows It
<p>Transport incubator; organ preservation unit</p>	<p>✔ A transport incubator unit necessary to protect life or an organ preservation unit provided additional requirements of 175.10 (a)(10)(14) are met.</p> 		<p>175.10(a)(14) A transport incubator unit necessary to protect life or an organ preservation unit necessary to protect human organs provided:</p> <ul style="list-style-type: none"> (i) The compressed gas used to operate the unit is in an authorized DOT specification cylinder and is marked, labeled, filled and maintained as prescribed by this subchapter; (ii) Each battery used in the operation of the unit is of the nonspillable type; (iii) The unit is constructed so that valves, fittings, and gauges are protected from damage; (iv) The pilot in command is advised when the unit is on board, and when it is intended for use; (v) The unit is accompanied by a person qualified to operate it; (vi) The unit is secured in the aircraft in a manner so as to restrict access to or use of any required emergency or regular exit or of the aisle in the passenger compartment; (vii) Smoking within 3m (10 feet) of the unit is prohibited.
<p>Items for use or sale on the aircraft carried by the operator (airline)</p>	<p>✔ Airline-provided alcoholic beverages, perfumes, colognes, and approved liquefied gas lighters.</p>	<p>✘ Unapproved lighters.</p>	<p>175.10(a)(15) Alcoholic beverages, perfumes, colognes, and liquefied gas lighters that have been examined by the Bureau of Explosives (B of E) and approved by the Associate Administrator, carried aboard a passenger-carrying aircraft by the operator for use or sale on the aircraft.</p>
<p>Duty-free perfume & cologne</p>	<p>✔ Flammable perfumes and colognes purchased through airport duty-free sales.</p>		<p>175.10(a)(16) Perfumes and colognes, purchased through duty-free sales, carried by passengers or crew in carry-on baggage.</p>

Passenger Hazmat Exceptions	Allowed	Not Allowed	49 CFR Regulatory Text That Allows It
<p>Alcoholic beverages</p>	<p>✔ Up to 5L of alcoholic beverages with alcohol content of more than 24% but not more than 70% in retail bottles.</p>  <p><i>Note – Alcoholic beverages containing not more than 24 percent alcohol by volume (beer, wine, etc.) are not subject to the hazardous materials regulations.</i></p> 	<p>✘ Alcoholic beverages with more than 70% alcohol content (140 proof), including 95% grain alcohol and 150-proof rum.</p> 	<p>175.10(a)(17) Alcohol beverages containing:</p> <ul style="list-style-type: none"> (i) not more than 24% alcohol by volume; or (ii) more than 24% and not more than 70% alcohol by volume when in retail packaging not exceeding 5 liters (1.3 gallons) carried by a crew member or passenger in checked or carry-on baggage, with a total net quantity per person of 5 liters (1.3 gallons) for such beverages.
<p>Carbon dioxide cylinders for mechanical limbs</p>	<p>✔ Carbon dioxide cylinders and spare cylinders of similar size required during travel for the operation of mechanical limbs.</p>		<p>175.10(a)(18) Carbon dioxide gas cylinders worn by passengers for the operation of mechanical limbs and spare cylinders of a similar size for the same purpose in sufficient quantities to ensure an adequate supply for the duration of the journey.</p>

Passenger Hazmat Exceptions	Allowed	Not Allowed	49 CFR Regulatory Text That Allows It
<p>Wheelchair or other battery-powered mobility aid equipped with a <u>nospillable battery</u></p>	<p>✔ Wheelchair or other battery-powered mobility aid equipped with a nospillable battery when carried as checked baggage.</p>  		<p>175.10(a)(19) A wheelchair or other battery-powered mobility aid equipped with a nospillable battery, when carried as checked baggage, provided that:</p> <ul style="list-style-type: none"> (i) The battery meets the provisions of 173.159(d) for nospillable batteries; (ii) Visual inspection including, where necessary, removal of the battery, reveals no obvious defects (however, removal of the battery from the housing should be performed by qualified airline personnel only); (iii) The battery is disconnected and terminals are insulated to prevent short circuits; (iv) The battery is securely attached to the wheelchair or mobility aid, is removed and placed in a strong, rigid packaging that is marked "NONSPILLABLE BATTERY" (unless fully enclosed in a rigid housing that is properly marked), or is handled in accordance with paragraph (a)(20)(iv) of this section.

Passenger Hazmat Exceptions	Allowed	Not Allowed	49 CFR Regulatory Text That Allows It
<p>Wheelchair or other battery-powered mobility aid equipped with a <u>spillable battery</u></p>	<p>✔ Wheelchair or other battery-powered mobility aid equipped with a spillable battery when carried as checked baggage.</p>  		<p>175.10(a)(20) A wheelchair or other battery-powered mobility aid equipped with a spillable battery, when carried as checked baggage, provided:</p> <ul style="list-style-type: none"> (i) Visual inspection including, where necessary, removal of the battery, reveals no obvious defects (however, removal of the battery from the housing should be performed by qualified airline personnel only); (ii) The battery is disconnected and terminals are insulated to prevent short circuits; (iii) The pilot-in-command is advised, either orally or in writing, prior to departure, as to the location of the battery aboard the aircraft; (iv) The wheelchair or mobility aid is loaded, stowed, secured, and unloaded in an upright position or the battery is removed, the wheelchair or mobility aid is carried as checked baggage without further restriction, and the removed battery is carried in a strong, rigid packaging under the following conditions: <ul style="list-style-type: none"> (A) The packaging must be leak tight and impervious to battery fluid. An inner liner may be used to satisfy this requirement if there is absorbent material placed inside of the liner and the liner has a leakproof closure; (B) The battery must be protected against short circuits, secured upright in the packaging, and be packaged with enough compatible absorbent material to completely absorb liquid contents in the event of rupture of the battery; (C) The packaging must be labeled with the words "Battery, wet, with wheelchair".

Passenger Hazmat Exceptions	Allowed	Not Allowed	49 CFR Regulatory Text That Allows It
<p>Curling irons (cordless)</p>	<p>✔ One gas (butane) operated hair curler per passenger or crew member.</p> 	<p>✘ Gas refills (spare butane cartridges) for such curlers are not permitted.</p> 	<p>175.10(a)(21) Hair curlers containing hydrocarbon gas, no more than one per passenger or crew member, provided that the safety cover is securely fitted over the heating element. Gas refills for such curlers are not permitted in checked or carry-on baggage.</p>
<p>Mercury barometer or thermometer</p>	<p>✔ Mercury barometer or thermometer carried by government official</p> <p><i>See next page for small medical mercury thermometer</i></p> 		<p>175.10(a)(22) A mercurial barometer or thermometer carried as carry-on baggage only, by a representative of a government weather bureau or similar official agency, provided that individual advises the operator of the presence of the barometer or thermometer in his baggage. The barometer or thermometer must be packaged in a strong outer packaging having sealed inner liner or bag of strong, leak proof and puncture-resistant material impervious to mercury, which will prevent the escape of mercury from the package irrespective of its position. The pilot-in-command must be informed of the presence of any such barometer or thermometer by the operator of the aircraft.</p>
<p>Heat producing articles</p>	<p>✔ Electrically powered (battery-operated) equipment such as underwater diving lamps and portable soldering equipment, when the heat producing component or energy source (battery) is removed.</p> 		<p>175.10(a)(23) With the approval of the operator of the aircraft and as carry-on baggage, electrically powered heat-producing articles (e.g. battery-operated equipment, such as underwater torches and soldering equipment), which, if accidentally activated, will generate extreme heat and can cause fire. The heat-producing component, or the energy source, must be removed so as to prevent unintentional functioning during transport.</p>

Passenger Exceptions	Allowed	Not Allowed	49 CFR Regulatory Text That Allows It
<p>Gas cylinders for self-inflating life jackets</p>	<p>✔ With the approval of the aircraft operator and when fitted in a self-inflating lifejacket, up to two non-flammable gas cylinders plus two spares.</p> 		<p>175.10(a)(25) With approval of the aircraft operator, a passenger or crew member may carry in checked or carry-on baggage, no more than two small gas cartridges containing no hazardous material other than Division 2.2 gas that are fitted into a self-inflating lifejacket for inflation purposes, plus no more than two spare cartridges.</p>
<p>Medical or clinical mercury thermometer</p>	<p>✔ One mercury medical or clinical thermometer in a protective case per passenger or crewmember.</p>		<p>175.10(a)(26) A small medical or clinical mercury thermometer for personal use, when carried in protective cases by passenger or crewmembers.</p>

Though the FAA enforces these regulations in air transportation, the Hazardous Materials Regulations (49 CFR Parts 100-185) are written, issued, and officially interpreted by the US DOT Research and Special Programs Administration, Office of Hazardous Materials Safety.

For questions or comments concerning these regulations, please contact the Hazardous Materials Information Center at: 1-800-467-4922 or infocntr@rspa.dot.gov.