

- D. The Director of Operations, PIC, and Stores / Parts employees are responsible for identifying COMAT parts as hazardous and non-hazardous. The Director of Operations and/or PIC will be responsible for maintaining an accurate SDS to ensure accurate classification. Stores / Parts employees will ensure proper storage and segregation.
- The Director of Operations is the only company-trained employee to prepare and/or offer hazardous material COMAT shipments.
 - When performing a shipper's function, Director of Operations must ensure all of the requirements for shippers under 49 CFR Part 172 Subpart H are satisfied. Shippers under 49 CFR 172.704 must receive the following in addition to the function-specific training:
 1. General awareness/familiarization training;
 2. Safety training;
 3. Security awareness training;
 4. In-depth security training (if a security plan is required).

1.3.6 Exceptions for Passenger and Crewmembers

- A. [49 CFR Part 175.10](#) does not apply to the following hazardous materials when carried by aircraft passengers or crewmembers provided the requirements of [49 CFR 171.15](#) and [171.16](#) (see [paragraph \(c\) of 49 CFR 175.10](#)) and the requirements of this section are met:

(1)

- (i) Non-radioactive medicinal and toilet articles for personal use (including aerosols) carried in carry-on and checked baggage. Release devices on aerosols must be protected by a cap or other suitable means to prevent inadvertent release;
- (ii) Other aerosols in Div. 2.2 (nonflammable gas) with no subsidiary risk carried in carry-on or checked baggage. Release devices on aerosols must be protected by a cap or other suitable means to prevent inadvertent release; and
- (iii) The aggregate quantity of these hazardous materials carried by each 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 500 ml (17 fluid ounces) by volume.

- (2) One packet of safety matches or a lighter intended for use by an individual when carried on one's person or in carry-on baggage only. Lighter fuel, lighter refills, and lighters containing unabsorbed liquid fuel (other than liquefied gas) are not permitted on one's person or in carry-on or checked baggage. For lighters powered by lithium batteries (e.g., laser plasma lighters, tesla coil lighters, flux lighters, arc lighters and double arc lighters), each battery must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, Subsection 38.3 (IBR, see [49 CFR 171.7](#)). The lighters must be equipped with a safety cap or similar means of protection to prevent unintentional activation of the heating element while on board the aircraft. Recharging of the devices and/or the batteries on board the aircraft is not permitted. Each battery must not exceed the following:

- (i) For lithium metal batteries, a lithium content of 2 grams; or
- (ii) For lithium ion batteries, a Watt-hour (Wh) rating of 100 Wh.

- (3) Medical devices that contain radioactive materials (e.g., cardiac pacemaker) implanted or externally fitted in humans or animals and radiopharmaceuticals that have been injected or ingested as the result of medical treatment.

- (4) Alcoholic beverages containing:

- (i) Not more than 24% alcohol by volume; or

- (ii) More than 24% and not more than 70% alcohol by volume when in unopened retail packagings not exceeding 5 liters (1.3 gallons) carried in carry-on or checked baggage, with a total net quantity per person of 5 liters (1.3) gallons for such beverages.
- (5) Perfumes and colognes purchased through duty-free sales and carried on one's person or in carry-on baggage.
- (6) Hair curlers (curling irons) containing a hydrocarbon gas such as butane, no more than one per person, in carry-on baggage only. The safety cover must be securely fitted over the heating element. Gas refills for such curlers are not permitted in carry-on or checked baggage.
- (7) A small medical or clinical mercury thermometer for personal use, when carried in a protective case in checked baggage.
- (8) Small arms ammunition for personal use carried by a crewmember or passenger in checked baggage only, if securely packed in boxes or other packagings specifically designed to carry small amounts of ammunition. Ammunition clips and magazines must also be securely boxed. This paragraph does not apply to persons traveling under the provisions of [49 CFR 1544.219](#).
- (9) One self-defense spray (see [49 CFR 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.
- (10) Dry ice (carbon dioxide, solid), with the approval of the operator:
 - (i) Quantities may not exceed 2.5 kg (5.5 pounds) per person when used to pack perishables not subject to the HMR. The package must permit the release of carbon dioxide gas; and
 - (ii) When carried in checked baggage, each package is marked "DRY ICE" or "CARBON DIOXIDE, SOLID," and marked with the net weight of dry ice or an indication the net weight is 2.5 kg (5.5 pounds) or less.
- (11) A single self-inflating personal safety device such as a life jacket or vest fitted with no more than two small gas cartridges (containing no hazardous material other than a Div. 2.2 gas) for inflation purposes plus no more than two spare cartridges. The personal safety device and spare cartridges may be carried in carry-on or checked baggage, with the approval of the aircraft operator, and must be packed in such a manner that it cannot be accidentally activated.
- (12) Small compressed gas cylinders of Division 2.2 (containing no hazardous material other than a Division 2.2 gas) worn by the passenger for the operation of mechanical limbs and, in carry-on and checked baggage, spare cylinders of a similar size for the same purpose in sufficient quantities to ensure an adequate supply for the duration of the journey.
- (13) A mercury barometer or thermometer carried as carry-on baggage, 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 packaging having a 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 in any position.

- (14) Battery powered heat-producing devices (e.g., battery-operated equipment such as diving lamps and soldering equipment) as checked or carry-on baggage and with the approval of the operator of the aircraft. The heating element, the battery, or other component (e.g., fuse) must be isolated to prevent unintentional activation during transport. Any battery that is removed must be carried in accordance with the provisions for spare batteries in [49 CFR 175.10\(a\)\(18\)](#) of this section. Each installed or spare lithium battery:
- (i) For a lithium metal battery, a lithium content must not exceed 2 grams; or
 - (ii) For a lithium ion battery, the Watt-hour rating must not exceed 100 Wh.
- (15) A wheelchair or other battery-powered mobility aid equipped with a non-spillable battery or a dry sealed battery when carried as checked baggage, provided -
- (i) The battery conforms to the requirements of [49 CFR 173.159a\(d\)](#) for non-spillable batteries;
 - (ii) The battery conforms to the requirements of [49 CFR 172.102\(c\)\(1\)](#), special provision 130 of the HMR for dry sealed batteries, as applicable;
 - (iii) Visual inspection including removal of the battery, where necessary, reveals no obvious defects (removal of the battery from the housing should be performed by qualified airline personnel only);
 - (iv) The battery is disconnected and the battery terminals are protected to prevent short circuits, unless the wheelchair or mobility aid design provides an effective means of preventing unintentional activation;
 - (v) The non-spillable battery is -
 - (A) Securely attached to the wheelchair or mobility aid;
 - (B) Removed and placed in a strong, rigid packaging marked "NONSPILLABLE BATTERY" (unless fully enclosed in a rigid housing that is properly marked); or
 - (C) Is handled in accordance with [49 CFR 175.10\(a\)\(16\)\(iv\)](#); and
 - (vi) The dry sealed battery is -
 - (A) Securely attached to the wheelchair or mobility aid; or
 - (B) Removed and placed in a strong, rigid packaging marked with the words "not restricted" in accordance with [49 CFR 172.102\(c\)\(2\)](#), special provision 130;
 - (vii) A maximum of one spare battery that conforms to the requirements in [49 CFR 175.10\(a\)\(15\)\(i\)](#) or [\(ii\)](#) may be carried per passenger if handled in accordance with [49 CFR 175.10\(a\)\(15\)\(v\)](#) or [\(vi\)](#), as applicable.
- (16) A wheelchair or other battery-powered mobility aid equipped with a spillable battery, when carried as checked baggage, provided -
- (i) Visual inspection including removal of the battery, where necessary, 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; and
 - (iv) The wheelchair or mobility aid is loaded, stowed, secured and unloaded in an upright position, or the battery is removed, and carried in a strong, rigid packaging under the following conditions:
 - (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; and
 - (C) The packaging must be labeled with a CORROSIVE label, marked to indicate proper orientation, and marked with the words "Battery, wet, with wheelchair."
- (17) A wheelchair or other mobility aid equipped with a lithium ion battery, when carried as checked baggage, provided -
- (i) The lithium ion battery must be of a type that successfully passed each test in the UN Manual of Tests and Criteria (IBR; see [49 CFR 171.7](#)), as specified in [49 CFR 173.185](#), unless approved by the Associate Administrator;
 - (ii) The operator must verify that:
 - (A) Visual inspection of the wheelchair or other mobility aid reveals no obvious defects;
 - (B) Battery terminals are protected from short circuits (e.g., enclosed within a battery housing);
 - (C) The battery must be securely attached to the mobility aid; and
 - (D) Electrical circuits are isolated;
 - (iii) The wheelchair or other mobility aid must be loaded and stowed in such a manner to prevent its unintentional activation and its battery must be protected from short circuiting;
 - (iv) The wheelchair or other mobility aid must be protected from damage by the movement of baggage, mail, service items, or other cargo;
 - (v) Where a lithium ion battery-powered wheelchair or other mobility aid does not provide adequate protection to the battery:
 - (A) The battery must be removed from the wheelchair or other mobility aid according to instructions provided by the wheelchair or other mobility aid owner or its manufacturer;
 - (B) The battery must be carried in carry-on baggage only;
 - (C) Battery terminals must be protected from short circuits (by placement in original retail packaging or otherwise insulating the terminal e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch);
 - (D) The battery must not exceed 300 Watt-hour (Wh); and
 - (E) A maximum of one spare battery not exceeding 300 Wh or two spares not exceeding 160 Wh each may be carried;
 - (vi) The pilot-in-command is advised either orally or in writing, prior to departure, as to the location of the lithium ion battery or batteries aboard the aircraft.

- (18) Except as provided in [49 CFR 173.21](#) of the HMRs, portable electronic devices (e.g., watches, calculating machines, cameras, cellular phones, laptop and notebook computers, camcorders, medical devices, etc.) containing dry cells or dry batteries (including lithium cells or batteries) and spare dry cells or batteries for these devices, when carried by passengers or crew members for personal use. Portable electronic devices powered by lithium batteries may be carried in either checked or carry-on baggage. When carried in checked baggage, portable electronic devices powered by lithium batteries must be completely switched off (not in sleep or hibernation mode) and protected to prevent unintentional activation or damage. Spare lithium batteries must be carried in carry-on baggage only. Each installed or spare lithium battery must be of a type proven to meet the requirements of each test in the UN Manual of Tests and Criteria, Part III, Sub-section 38.3, and each spare lithium battery must be individually protected so as to prevent short circuits (e.g., by placement in original retail packaging, by otherwise insulating terminals by taping over exposed terminals, or placing each battery in a separate plastic bag or protective pouch). In addition, each installed or spare lithium battery:
- (i) For a lithium metal battery, the lithium content must not exceed 2 grams. With the approval of the operator, portable medical electronic devices (e.g., automated external defibrillators (AED), nebulizer, continuous positive airway pressure (CPAP), etc.) may contain lithium metal batteries exceeding 2 grams, but not exceeding 8 grams. With the approval of the operator, no more than two lithium metal batteries each exceeding 2 grams, but not exceeding 8 grams, may be carried as spare batteries for portable medical electronic devices in carry-on baggage and must be carried with the portable medical electronic device the spare batteries are intended to operate;
 - (ii) For a lithium ion battery, the Watt-hour rating must not exceed 100 Wh. With the approval of the operator, portable electronic devices may contain lithium ion batteries exceeding 100 Wh, but not exceeding 160 Wh and no more than two individually protected lithium ion batteries each exceeding 100 Wh, but not exceeding 160 Wh, may be carried per person as spare batteries in carry-on baggage.
 - (iii) For a non-spillable battery, the battery and equipment must conform to [49 CFR 173.159a\(d\)](#). Each battery must not exceed a voltage greater than 12 volts and a watt-hour rating of not more than 100 Wh. No more than two individually protected spare batteries may be carried. Such equipment and spare batteries must be carried in checked or carry-on baggage.
 - (iv) Articles containing lithium metal or lithium ion cells or batteries the primary purpose of which is to provide power to another device must be carried as spare batteries in accordance with the provisions of this paragraph.
- (19) Except as provided in [49 CFR 173.21](#) of the HMRs, battery-powered portable electronic smoking devices (e.g., e-cigarettes, e-cigs, e-cigars, e-pipes, e-hookahs, personal vaporizers, electronic nicotine delivery systems) when carried by passengers or crewmembers for personal use must be carried on one's person or in carry-on baggage only. Measures must be taken to prevent unintentional activation of the heating element while on board the aircraft. Spare lithium batteries also must be carried on one's person or in carry-on baggage only and must be individually protected so as to prevent short circuits (by placement in original retail packaging or by otherwise insulating terminals, e.g., by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch). Each lithium battery must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, Subsection 38.3. Recharging of the devices and/or the batteries on board the aircraft is not permitted. Each installed or spare lithium battery:
- (i) For a lithium metal battery, the lithium content must not exceed 2 grams; or

- (ii) For a lithium ion battery, the Watt-hour rating must not exceed 100 Wh.
- (20) Fuel cells used to power portable electronic devices (e.g., cameras, cellular phones, laptop computers and camcorders) and spare fuel cell cartridges when transported personal use under the following conditions:
- (i) Fuel cells and fuel cell cartridges may contain only Division 2.1 liquefied flammable gas, or hydrogen in a metal hydride, Class 3 flammable liquid (including methanol), Division 4.3 water-reactive material, or Class 8 corrosive material;
 - (ii) The quantity of fuel in any fuel cell or fuel cell cartridge may not exceed:
 - (A) 200 mL (6.76 ounces) for liquids;
 - (B) 120 mL (4 fluid ounces) for liquefied gases in non-metallic fuel cell cartridges, or 200 mL (6.76 ounces) for liquefied gases in metal fuel cell cartridges;
 - (C) 200 g (7 ounces) for solids; or
 - (D) For hydrogen in metal hydride, the fuel cell cartridges must have a water capacity of 120 mL (4 fluid ounces) or less;
 - (iii) No more than two spare fuel cell cartridges may be carried by a passenger or crew member as follows:
 - (A) Fuel cell cartridges containing Class 3 flammable liquid (including methanol) and Class 8 corrosive material in carry-on or checked baggage; and
 - (B) Division 2.1 liquefied flammable gas or hydrogen in a metal hydride and Division 4.3 water-reactive material in carry-on baggage only;
 - (iv) Fuel cells containing fuel are permitted in carry-on baggage only;
 - (v) Fuel cell cartridges containing hydrogen in a metal hydride must meet the requirements in [49 CFR 173.230\(d\)](#) of the HMRs;
 - (vi) Refueling of a fuel cell aboard an aircraft is not permitted except that the installation of a spare cartridge is allowed;
 - (vii) Each fuel cell and fuel cell cartridge must conform to IEC 62282-6-100 and IEC 62282-6-100 Amend. 1 (IBR; see [49 CFR 171.7](#)) and must be marked with a manufacturer's certification that it conforms to the specification. In addition, each fuel cell cartridge must be marked with the maximum quantity and type of fuel in the cartridge;
 - (viii) Interaction between fuel cells and integrated batteries in a device must conform to IEC 62282-6-100 and IEC 62282-6-100 Amend. 1 (IBR, see [49 CFR 171.7](#)). Fuel cells whose sole function is to charge a battery in the device are not permitted; and
 - (ix) Fuel cells must be of a type that will not charge batteries when the consumer electronic device is not in use and must be durably marked by the manufacturer with the wording: "APPROVED FOR CARRIAGE IN AIRCRAFT CABIN ONLY" to indicate that the fuel cell meets this requirement.
- (21) Permeation devices for calibrating air quality monitoring equipment when carried in checked baggage provided the devices are constructed and packaged in accordance with [49 CFR 173.175](#).
- (22) An internal combustion or fuel cell engine or a machine or apparatus containing an internal combustion or fuel cell engine when carried as checked baggage, provided -
- (i) The engine contains no liquid or gaseous fuel. An engine may be considered as not containing fuel when the engine components and any fuel lines have been completely drained, sufficiently cleaned of residue, and purged of vapors to remove any potential hazard and the engine when held in any orientation will not release any liquid fuel;

- (ii) The fuel tank contains no liquid or gaseous fuel. A fuel tank may be considered as not containing fuel when the fuel tank and the fuel lines have been completely drained, sufficiently cleaned of residue, and purged of vapors to remove any potential hazard;
 - (iii) It is not equipped with a wet battery (including a non-spillable battery), a sodium battery or a lithium battery; and
 - (iv) It contains no other hazardous materials subject to the requirements of the HMRs.
- (23) Non-infectious specimens in preservative solutions transported in accordance with [49 CFR 173.4b\(b\)](#) of the HMRs.
- (24) Insulated packagings containing refrigerated liquid nitrogen when carried in checked or carry-on baggage in accordance with the ICAO Technical Instructions (IBR, see [49 CFR 171.7](#)), Packing Instruction 202, the packaging specifications in part 6, chapter 5, and special provision A152.
- (25) Small cartridges fitted into or securely packed with devices with no more than four small cartridges of carbon dioxide or other suitable gas in Division 2.2, without subsidiary risk with the approval of the operator. The water capacity of each cartridge must not exceed 50 mL (equivalent to a 28 g cartridge).
- (26) Baggage equipped with lithium battery(ies) must be carried as carry-on baggage unless the battery(ies) is removed from the baggage. Removed battery(ies) must be carried in accordance with the provision for spare batteries prescribed in [49 CFR 175.10\(a\)\(18\)](#). The provisions of this paragraph do not apply to baggage equipped with lithium batteries not exceeding:
 - (i) For lithium metal batteries, a lithium content of 0.3 grams; or
 - (ii) For lithium ion batteries, a Watt-hour rating of 2.7 Wh.
- B. The exceptions provided in [paragraph \(a\) of 49 CFR Part 175.10](#) also apply to aircraft operators when transporting passenger or crewmember baggage that has been separated from the passenger or crewmember, including transfer to another carrier for transport to its final destination.
- C. The requirements to submit incident reports as required under [49 CFR Parts 171.15](#) and [171.16](#) apply to the air carrier.
- D. The two types of batteries commonly used to power consumer PEDs brought on aircraft are lithium batteries (disposable) and lithium-ion batteries (rechargeable). Both these types are capable of ignition and subsequent explosion due to overheating. Overheating results in thermal runaway, which can cause the release of either molten burning lithium or a flammable electrolyte. Once one cell in a battery pack goes into thermal runaway, it produces enough heat to cause adjacent cells to go into thermal runaway. The resulting fire can flare repeatedly as each cell ruptures and releases its contents.
- E. Electronic Cigarettes (e-cigarettes): A safety alert for operators for the carriage of e-cigarettes and other important alerts can be found at the following link:
https://www.faa.gov/sites/faa.gov/files/other_visit/aviation_industry/airline_operators/airline_safety/SAFO15003.pdf
- F. The following procedures are recommended for fighting a fire of a lithium-type-battery powered PED. The procedures consist of two phases: (1) extinguishing the fire, and (2) cooling the remaining cells to stop thermal runaway.
 - 1. Utilize a Halon, Halon replacement or water extinguisher to extinguish the fire and prevent its spread to additional flammable materials.

2. After extinguishing the fire, douse the device with water or other non-alcoholic liquids to cool the device and prevent additional battery cells from reaching thermal runaway.

WARNING: Do not attempt to pick up and move a smoking or burning device! Bodily injury may result.

WARNING: Do not cover the device or use ice to cool the device. Ice or other materials insulate the device, increasing the likelihood that additional battery cells will reach thermal runaway.

1.4.0 Dangerous Goods Incidents

For an emergency or incident requiring immediate response, contact any of the FAA’s 24-hour operations centers:

Headquarters 24-Hour Operations Center: 202-267-3333 (Washington, DC)

Regional 24-Hour Operations Centers	
Areas of Responsibility	Phone
Alabama, Florida, Georgia, Kentucky, North Carolina, Mississippi, South Carolina, Tennessee, Puerto Rico, and U.S. Virgin Islands, Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, West Virginia, and the District of Columbia	404-305-5180
Illinois, Indiana, Michigan, Minnesota, North Dakota, Ohio, South Dakota, Wisconsin, Arkansas, Iowa, Kansas, Louisiana, Missouri, New Mexico, Nebraska, Oklahoma, and Texas	817-222-5006
Alaska, Colorado, Idaho, Montana, Oregon, Utah, Washington, Wyoming, Arizona, California, Nevada, Hawaii, Guam, and American Samoa	206-231-2000

1.4.1 Procedures

- A. The Director of Operations must be immediately notified of any incident or emergency involving dangerous goods.
- B. Spillage or Leakage of Dangerous Goods:
 - The primary consideration will be to ensure personnel, passenger, and crewmember safety. Resolution of the incident will be in accordance with the IATA DGR, SDS, and [49 CFR Part 171, Subpart B](#).
 - If spillage or leakage of dangerous goods is observed, the following actions will be taken:
 - Refer to the SDS for the material for safe cleanup practices;
 - Remove the items from the aircraft as soon as practicable and safe to do so;
 - Prevent the item from being re-loaded onto other aircraft;
 - Contact emergency services (as appropriate);
 - Assess contamination to other luggage or cargo.
- C. The following information will be reported to the State of occurrence as soon as possible:
 - Shipper Information:
 - Aircraft Operator and flight number (if applicable);
 - Shipper (if different from the aircraft operator);
 - Flight origin and destination.

Appendix F: Hazardous Materials Notification Materials

Hazardous Materials Briefing Card



WHAT IS A HAZARDOUS MATERIAL?

Hazardous materials (hazmat) include, but are not limited to:

- Explosives, Fireworks, and Ammunition
- Gases and Aerosols
- Flammable Liquids and Solids
- Oxidizers and Organic Peroxides
- Toxic and Infectious Materials
- Radioactive Materials
- Corrosives
- And many other articles such as lithium batteries, e-cigarettes, battery-powered vehicles and dry ice.

When traveling by commercial aircraft, U.S. Federal regulations (49 CFR, parts 171-180) forbid most hazardous materials in your checked baggage, carry-on baggage, or on your person (in pocket, etc.). The FAA enforces these regulations and issues fines to passengers that violate the rules. See reverse side for examples of forbidden and permitted hazardous materials.



FAA "HAZARDOUS MATERIALS" vs. TSA "PROHIBITED ITEMS"

For security reasons, the Transportation Security Administration (TSA) restricts passengers from carrying additional "prohibited items" such as weapons and sharp objects.

For TSA security guidance on:

- Knives and sharp objects
- Liquids, gels, and aerosols in carry-on
- Medicines and syringes
- Firearms and ammunition declaration
- Passenger and baggage screening

Please visit the Transportation Security Administration website: www.tsa.gov
Or call 866-289-9673



QUESTIONS ON HAZARDOUS MATERIALS IN CARRY-ON OR CHECKED BAGGAGE?

For detailed information on the rules and exceptions, please go to:
www.faa.gov/Go/PackSafe

Or call the US DOT Hazardous Materials Information Center at:
1-800-467-4922 / 202-366-4488

Or scan the QR code below:



When in doubt...
Leave it out!

WWW.FAA.GOV/GO/PACKSAFE



HAZARDOUS MATERIALS IN AIRLINE BAGGAGE




WHAT TO PACK



WHAT TO LEAVE BACK



FORBIDDEN HAZMAT

As a general rule, airline passengers cannot carry hazardous materials in checked baggage or into the aircraft cabin (carry-on baggage).

The items shown here are just a partial list of forbidden hazardous materials.

Go to www.faa.gov/Go/PackSafe for more information.



Explosives, fireworks, and ammunition; including black powder, firecrackers, poppers, sparklers, bottle rockets, flares, and other explosives. Unloaded firearms and some small arms ammunition may be in checked baggage when properly packaged and declared.



Compressed, flammable, or toxic gases; including oxygen, butane, propane, refrigerant gases for cars, and pressurized scuba tanks.



Aerosols; including spray starch, antistatic spray, spray paint, air freshener, cooking spray, etc. Some personal medicinal/toiletry aerosols like hairspray are allowed.



Flammable liquids; including fuels, lighter fluid, solvents, and some paint strippers, pool chemicals, strong bleaches, car batteries, and wet batteries.



Corrosives and oxidizers; including drain cleaners, paint strippers, pool chemicals, strong bleaches, car batteries, and wet batteries.



Poisons (toxics) and infectious substances; including some pesticides/herbicides; specimens known to be infectious/pathogenic.



Radioactive materials; including radioisotopes, equipment, and contaminated materials. Radioactive medicines injected/ingested/implanted in passengers are allowed.

PERMITTED HAZMAT

Airline passengers may carry small amounts of some hazardous materials, subject to quantity/size limits and other restrictions.

Some items, such as spare lithium batteries and electronic cigarettes are allowed in the aircraft cabin (carry-on) but are forbidden in checked baggage—including bags checked at the gate or plane side.

Go to: www.faa.gov/Go/PackSafe for a complete list of permitted hazardous materials and the limits and restrictions for each.

Medicinal and toilet articles that are hazardous materials; including aerosols (if nozzles are protected), hairsprays, perfumes, nail polish and remover, inhalers, antiseptics, insect repellants, etc. No more than 0.5 kg/L (18 oz. / 17 fl. oz.) per container and 2 kg/L (70 oz. / 68 fl. oz.) total per person.*



One book of matches or a lighter in carry-on or on your person (in your pocket). Spare lighter fluid, butane, strike-anywhere matches, and torch lighters are forbidden.



One small self-defense spray (4 oz.) in checked baggage only (not allowed outside the US).



Battery-powered wheelchairs and mobility devices when properly prepared. Contact your airline for guidance.



Batteries in portable electronic devices (laptops, cell phones, cameras, etc.). Spare batteries must be securely packed with the terminals protected. Spare lithium batteries and electronic cigarettes are forbidden in checked baggage.



Alcoholic beverages in unopened retail packagings, 70% alcohol by volume (140-proof) or below.*



Small arms ammunition securely boxed: in checked baggage only. Cartridges up to .75 caliber and all sizes of shotgun shells are permitted when properly declared.



Engine powered equipment when completely drained and purged of all fuel and vapors from engine, fuel tanks, and lines.



*TSA security rules limit most liquids, gels, and aerosols in carry-on baggage to 100-ml (3.4-ounce) containers. This does not affect purchases made beyond the passenger screening checkpoint.

**These items are often further restricted/limited by airlines. Check your carrier's policy.