The U.S. Department of Transportation divides regulated hazardous materials into the following nine classes, most of which are further divided into divisions:

Class 1: Explosives

- 1.1 Explosives with a mass explosion hazard (dynamite, TNT, black powder)
- 1.2 Explosives with a projection hazard (aerial flares, power device cartridges, detonating cord)
- 1.3 Explosives with predominantly a fire hazard (propellant explosives, liquid-fueled rocket motors)
- 1.4 Explosives with no significant blast hazard (signal cartridges, practice ammunition, line-throwing rockets)
- 1.5 Very insensitive explosives with a mass explosion hazard (blasting agents, pilled ammonium nitrate fertilizer-fuel oil mixtures)
- 1.6 Extremely insensitive explosives

Class 2: Gases

- 2.1 Flammable gases (propane, methyl chloride, butadienes)
- 2.2 Non-flammable, non-toxic gases (compressed nitrogen, cryogenic argon)
- 2.3 Toxic Poisonous; can injure or kill people or other organisms gases (chlorine, hydrogen fluoride, arsine, methyl bromide)
- Class 3: Flammable liquids Has a flash point of no more than 141 degrees F (60.5 deg C). Ignites and burns readily and combustible liquids Has a flash point between 141 and 200 degrees F (60.5 93 degrees C) . Can be ignited.

 Gasoline, fuel oil, xylene
- Class 4: Flammable Easy to ignite and burns readily solids, spontaneously combustible Can be ignited and burned materials, and water-reactive Can react vigorously when mixed with water or spilled into water; the reaction may generate hazardous gas or overpressurize container substances ("Dangerous when wet" materials)
- 4.1 Flammable solids (magnesium, nitrocellulose)
- 4.2 Spontaneously combustible materials (charcoal briquettes, phosphorus)

- 4.3 Water-reactive substances/dangerous when wet materials (calcium carbide, magnesium powder, sodium hydride)
- Class 5: Oxidizing substances and organic peroxides Powerful oxidizing agent containing two joined oxygen atoms; may be dangerously unstable
- 5.1 Oxidizers Or Oxidizing agent. Substance that yields oxygen readily to support a fire (ammonium nitrate, calcium hypochlorite)
- 5.2 Organic peroxides (methyl ethyl ketone peroxide, benzoyl peroxide)
- Class 6: Toxic substances and infectious substances
- 6.1 Poisonous liquids or solids (aniline, arsenic compounds, hydrocyanic acid, chemical warfare agents)
- 6.2 Infectious/biohazardous substances (anthrax, botulism, tetanus)
- Class 7: Radioactive Emits invisible and potentially harmful radiation materials (uranium hexafluoride, yellowcake)
- Class 8: Corrosive Liquid or solid that can destroy human skin or lung tissue or corrode metals substances (nitric acid, sulfuric acid, sodium hydroxide)
- Class 9: Miscellaneous hazardous materials

Material which presents a hazard during transportation but does not meet the definition of any other hazard class