



Classes of dangerous goods



CLASS 1 – EXPLOSIVES

Explosives are materials or items which have the ability to rapidly conflagrate or detonate as a consequence of chemical reaction.

Sub-Divisions

Division 1.1: Substances and articles which have a mass explosion hazard

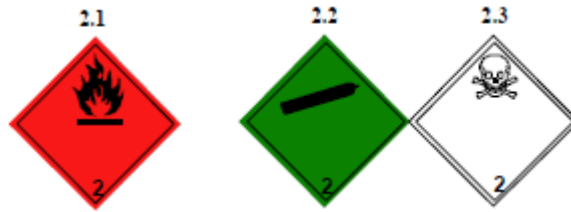
Division 1.2: Substances and articles which have a projection hazard but not a mass explosion hazard

Division 1.3: Substances and articles which have a fire hazard and either a minor blast hazard or a minor projection hazard or both

Division 1.4: Substances and articles which present no significant hazard; only a small hazard in the event of ignition or initiation during transport with any effects largely confined to the package

Division 1.5: Very insensitive substances which have a mass explosion hazard

Division 1.6: Extremely insensitive articles which do not have a mass explosion hazard



CLASS 2 – GASES

Gases are defined by dangerous goods regulations as substances which have a vapour pressure of 300 kPa or greater at 50°C or which are completely gaseous at 20°C at standard atmospheric pressure, and items containing these substances. The class encompasses compressed gases, liquefied gases, dissolved gases, refrigerated liquefied gases, mixtures of one or more gases with one or more vapours of substances of other classes, articles charged with a gas and aerosols.

Sub-Divisions

Division 2.1: Flammable gases

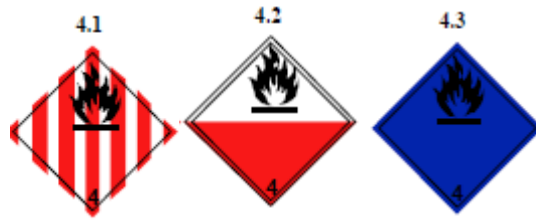
Division 2.2: Non-flammable, non-toxic gases

Division 2.3: Toxic gases



CLASS 3 – FLAMMABLE LIQUIDS

Flammable liquids are defined by dangerous goods regulations as liquids, mixtures of liquids or liquids containing solids in solution or suspension which give off a flammable vapour (have a flash point) at temperatures of not more than 60-65°C, liquids offered for transport at temperatures at or above their flash point or substances transported at elevated temperatures in a liquid state and which give off a flammable vapour at a temperature at or below the maximum transport temperature.



CLASS 4 – FLAMMABLE SOLIDS; SUBSTANCES LIABLE TO SPONTANEOUS COMBUSTION; SUBSTANCES WHICH EMIT FLAMMABLE GASES WHEN IN CONTACT WITH WATER

Flammable solids are materials which, under conditions encountered in transport, are readily combustible or may cause or contribute to fire through friction, self-reactive substances which are liable to undergo a strongly exothermic reaction or solid desensitized explosives. Also included are substances which are liable to spontaneous heating under normal transport conditions, or to heating up in contact with air, and are consequently liable to catch fire and substances which emit flammable gases or become spontaneously flammable when in contact with water.

Sub-Divisions

Division 4.1: Flammable solids

Division 4.2: Substances liable to spontaneous combustion

Division 4.3: Substances which, in contact with water, emit flammable gases



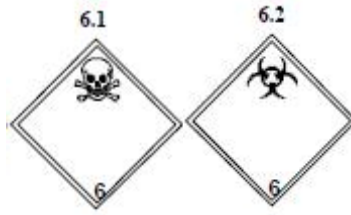
CLASS 5 – OXIDIZING SUBSTANCES; ORGANIC PEROXIDES

Oxidizers are defined by dangerous goods regulations as substances which may cause or contribute to combustion, generally by yielding oxygen as a result of a redox chemical reaction. Organic peroxides are substances which may be considered derivatives of hydrogen peroxide where one or both hydrogen atoms of the chemical structure have been replaced by organic radicals.

Sub-Divisions

Division 5.1: Oxidizing substances

Division 5.1: Organic peroxides



CLASS 6 – TOXIC SUBSTANCES; INFECTIOUS SUBSTANCES

Toxic substances are those which are liable either to cause death or serious injury or to harm human health if swallowed, inhaled or by skin contact. Infectious substances are those which are known or can be reasonably expected to contain pathogens. Dangerous goods regulations define pathogens as microorganisms, such as bacteria, viruses, rickettsiae, parasites and fungi, or other agents which can cause disease in humans or animals.

Sub-Divisions

Division 6.1: Toxic substances

Division 6.2: Infectious substances



CLASS 7 – RADIOACTIVE MATERIAL

Dangerous goods regulations define radioactive material as any material containing radionuclides where both the activity concentration and the total activity exceeds certain pre-defined values. A radionuclide is an atom with an unstable nucleus and which consequently is subject to radioactive decay.



CLASS 8 – CORROSIVES

Corrosives are substances which by chemical action degrade or disintegrate other materials upon contact.



CLASS 9 – MISCELLANEOUS DANGEROUS GOODS

Miscellaneous dangerous goods are substances and articles which during transport present a danger or hazard not covered by other classes. This class encompasses, but is not limited to, environmentally hazardous substances, substances that are transported at elevated temperatures, miscellaneous articles and substances, genetically modified organisms and micro-organisms and (depending on the method of transport) magnetized materials and aviation regulated substances.