

Common dangerous goods

Common dangerous goods include the following goods listed by UN Class and Division:

Class 1 Explosives - rifle ammunition, fireworks, flares, blasting explosives and toy caps.

Class 2.1 Flammable Gases - disposable cigarette lighters and refills for gas lighters, acetylene (for oxy-acetylene welding and brazing), ethylene (for ripening fruit) and hydrogen (for university and some industry use).

Class 2.2 Non-Flammable Non-Toxic Gases - carbon dioxide (found in soft drink dispensing machines), oxygen (for hospitals and oxy-acetylene welding), compressed air, freons (for refrigeration, air conditioning and polyurethane manufacture), compressed nitrogen and argon (for welding). Also, liquid oxygen and liquid nitrogen (for industrial applications).

Class 2.3 Toxic Gases - methyl bromide and ethylene oxide (for fumigation), chlorine (for commercial swimming pool water sanitation) and ammonia (for industrial freezing works).

Aerosols - fly sprays, room fresheners, aerosol deodorants and some oven cleaners etc are assigned to Division 2.1 or 2.2 depending on their properties.

Class 3 Flammable Liquids - petrol, mineral turpentine, kerosene, methylated spirits, enamel paints, car lacquers, polyurethane varnish, two-pot polyurethanes and their solvents, most varnishes and some dry-cleaning fluids, methanol, methyl ethyl ketone and polyester resin kits.

Class 4.1 Flammable Solids - fire lighters (Little Lucifers etc), matches, sulphur powder, synthetic camphor and naphthalene (moth balls).

Class 4.2 Substances Liable to Spontaneous Combustion

- white or yellow
phosphorous, copra and unstabilised fish meal.

Class 4.3 Dangerous When Wet - sodium and potassium metals and calcium carbide - used to produce acetylene gas.

Class 5.1 Oxidisers - calcium hypochlorite (pool chlorine HTH), some home bleaches and nappy sanitisers, hydrogen peroxide for swimming pool treatment and some fertilisers such as ammonium nitrate. Products used for stripping printed circuit board.

Class 5.2 Organic Peroxides - the hardeners from products such as Plastibond, Bondofill etc. Larger quantities are used in manufacturing industries.

Class 6.1 Toxic - some pesticides (eg most agricultural insecticides and some weed killers), and industry products such as sodium cyanide for metal treatment. Several metal degreasers are poisons, such as chromium salts in electroplating and copper chrome arsenate mixtures for timber preservatives. There are many, many more examples in this class.

Class 6.2 Infectious - examples are blood samples from people with infectious

and/or notifiable diseases, septic tank effluent wastes, cultures containing pathogen(s) which may cause infection, needles and syringes under the 'needle and syringe programme'.

Class 7 Radioactive materials - used in industrial thickness measuring devices, for the sterilisation of medical products and as a treatment for cancer.

Class 8 Corrosives – car and truck batteries, glacial acetic acid used for peeling processed fruit, caustic soda (sodium hydroxide) and caustic potash (potassium hydroxide), and acids such as hydrochloric, sulphuric and nitric used in many industrial processes. Many dairy sanitisers and industrial cleaners are corrosive.

Class 9 Miscellaneous dangerous goods - a diverse range of substances or articles that have dangerous properties not covered by Classes 1 to 8. The 15th edition of the UN Recommendations lists 34 entries. Class 9 should not be regarded as presenting a lower risk than Classes 1 to 8. It includes blue, brown and white asbestos (cancer hazard), PCBs (environmental and health hazards), some ammonium nitrate fertilisers and environmentally hazardous substances, and lithium ion batteries. Aquatic environmentally toxic substances equivalent to HSNO ecotoxic classification 9.1A and 9.1B are classified as UN Class 9 packing group III for transport. UN Class 9 also includes substances transported at elevated temperature and genetically modified organisms.