










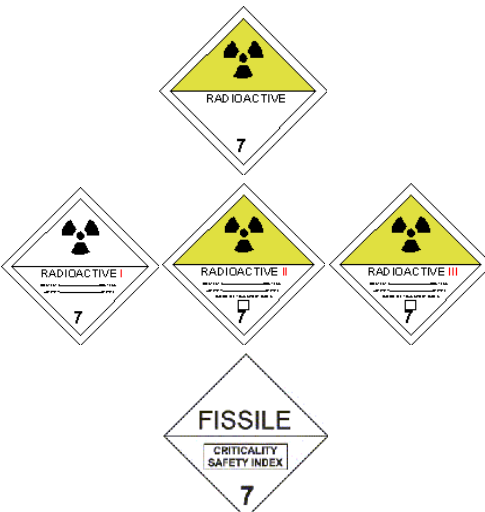

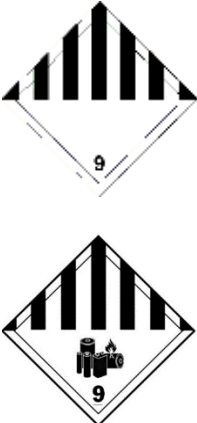


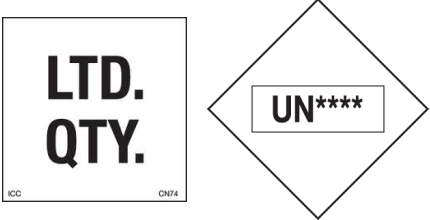
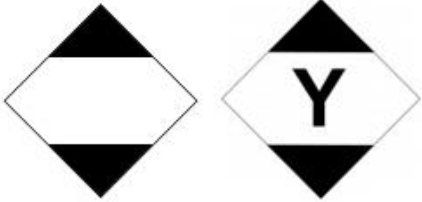




Transport of Dangerous Goods – Safety Marks

| Classes | Label and Placard |
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| <p>CLASS 1 – Explosives</p> <p>1.1 A substance or article with a mass explosion hazard.</p> <p>1.2 A substance or article with a fragment projection hazard, but not a mass explosion hazard.</p> <p>1.3 A substance or article which has a fire hazard along with either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard.</p> <p>1.4 A substance or article which presents no significant hazard; explosion effects are largely confined to the package and no projection or fragments of appreciable size or range are to be expected.</p> <p>1.5 A very insensitive substance which nevertheless has a mass explosion hazard like those substances in 1.1.</p> <p>1.6 An extremely insensitive article which does not have a mass explosion hazard.</p> |  <p>**place for division * place for the Compatibility Group Letter: 13 compatibility groups (A,B,C,D,E,F,G,H,J,K,L,N and S)</p> |
| <p>CLASS 2 – Gases</p> <p>2.1 Flammable Gas: commonly used as fuel (example: propane).</p> <p>2.2 Non-Flammable, Non-Toxic Gas: Commonly used in food refrigeration (example: nitrogen).</p> <p>2.3 Toxic Gas: commonly used in pulp bleaching (example: sulphur dioxide).</p> <p>Placards for special classes:</p> <ul style="list-style-type: none"> • Oxygen and oxidizing gases • Anhydrous ammonia (UN 1005) |  |
| <p>CLASS 3 - Flammable Liquids</p> <p>A liquid which has a closed-cup flash point not greater than 60°C.</p> <p>Commonly used as fuel (example: gasoline, ethanol, fuel oil (diesel)).</p> |  |

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| <p>CLASS 4 - Flammable Solids, Substances liable to spontaneous combustion; Substances that on contact with water emit flammable gases (water-reactive substances)</p> <p>4.1 A solid that under normal conditions of transport is readily combustible, or would cause or contribute to fire through friction or from heat retained from manufacturing or processing, or is a self-reactive substance that is liable to undergo a strongly exothermic reaction, or is a desensitized explosive that is liable to explode if they are not diluted sufficiently to suppress their explosive properties. Commonly used in lacquers (example: naphthalene).</p> <p>4.2 A substance liable to spontaneous combustion, under normal conditions of transport, or when in contact with air, liable to spontaneous heating to the point where it ignites. Commonly used in rocket fuel (example: sodium hydrosulphite).</p> <p>4.3 A substance that, on contact with water, emits dangerous quantities of flammable gases or becomes spontaneously combustible on contact with water or water vapour. Commonly used in heat exchangers (valves) (example: sodium).</p> |    |
| <p>CLASS 5- Oxidizing Substances and Organic Peroxides</p> <p>5.1 A substance which causes or contributes to the combustion of other material by yielding oxygen or other oxidizing substances whether or not the substance itself is combustible. Commonly used in fertilizers (example: ammonium nitrate).</p> <p>5.2 An organic compound that contains the bivalent “-O-O-” structure which is a strong oxidizing agent and may be liable to explosive decomposition, be sensitive to heat, shock or friction or react dangerously with other dangerous goods. Commonly used in automobile body shops as body filler (example: dibenzoyl peroxide).</p> |   |
| <p>CLASS 6 - Toxic Substances and Infectious Substances</p> <p>6.1 A solid or liquid that is toxic through inhalation, by skin contact or by ingestion. Commonly used as a germicide or general disinfectant (example: phenol).</p> <p>6.2 Micro-organisms that are infectious or that are reasonably believed to be infectious to humans or animals. Commonly used in disease research (example: rabies virus).</p> |   |
| <p>CLASS 6 - Category B</p> <p>Must be displayed, instead of the Class 6.2 (Infectious Substances label), on a small means of containment containing infectious substances included in: UN3373, BIOLOGICAL SUBSTANCE, CATEGORY B.</p> |  |

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| <p>CLASS 7 - Radioactive Materials</p> <p>Substances defined as Class 7, Radioactive Materials in the Packaging and Transport of Nuclear Substances Regulations. Commonly used in nuclear fuel rods (example: radioactive material - LSA (yellow cake)).</p> <p>There are three categories which indicate the surface radiation level for a package with Category I being the lowest level and Category III the highest (labels only).</p> <p>Special label for fissile materials category.</p> |  |
| <p>CLASS 8 – Corrosives</p> <p>A substance that causes destruction of skin or corrodes steel or non-clad aluminum. Commonly used in batteries and industrial cleaners (example: sulphuric acid and sodium hydroxide).</p> |  |
| <p>CLASS 9 - Miscellaneous Products, Substances or Organisms</p> <p>A substance that does not meet the criteria for inclusion in Classes 1 to 8. This includes genetically modified micro-organisms, marine pollutants, elevated temperature materials and environmentally hazardous substances. Used in dry cell batteries (example: ammonium chloride), polychlorinated biphenyls (PCB), asbestos brown, laboratory samples (not tested yet) or dry ice.</p> <p>There will also be a new Class 9 label specifically for lithium batteries. These new labels for all lithium battery shipments will be effective as of January 1, 2019 but early adopters are free to use them voluntarily as of January 1, 2017</p> |  |
| <p>Danger Placard</p> <p>When more than 1 primary class placards are required on the same transport unit (mixed loads). Cannot replace other placards when:</p> <ul style="list-style-type: none"> • ERAP required • Placards requiring a UN number • Class 1 (explosives) • Class 7 (radioactive substances) |  |

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| <p>Marine Pollutant</p> <p>A substance that is not a mixture or solution is a marine pollutant if there is “P” or “PP” or ● in column 10 of Schedule 1 opposite the shipping name of the substance or the substance is listed by name in column 1 of Appendix 1. For maritime transport only.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Parathion (PP) (severe marine pollutant) • Chlorine (P) (marine pollutant) • Liquefied petroleum gases (●) (possible pollutant) |  |
| <p>Limited Quantities (section 1.17)</p> <ul style="list-style-type: none"> • Inner packages are less than limit set in column 6 of Schedule 1 (L or kg) • Gross weight less than 30 kg (overall does not exceed 500 kg gross mass or else shipping document required) • No class 1 substances (explosives) allowed in this exemption <p>Packages must be marked with the words “Limited Quantity” or “LTD QTY” or “Consumer Commodity” or have UN label shown below on it (until Dec. 2020).</p> <p>Transport Canada also accepts the TDG Regulations to allow the use of the new international limited quantity marks (the one with the Y is for air shipments).</p> |   |
| <p>Excepted Quantities (section 1.17.1)</p> <p>Small quantities of hazardous materials, typically samples, that may be shipped as an exemption to the TDG regulations and just be marked with an Excepted Quantities safety mark. Not all dangerous goods are permitted to be shipped under this limitation.</p> |  |
| <p>Elevated Temperature Sign</p> <p>Must be displayed for dangerous goods that are in transport in a large means of containment and that are:</p> <ul style="list-style-type: none"> • UN3256 ELEVATED TEMPERATURE LIQUID, FLAMMABLE N.O.S., Class 3 • UN3257 ELEVATED TEMPERATURE LIQUID N.O.S., Class 9 • UN3258 ELEVATED TEMPERATURE SOLID N.O.S., Class 9 <p>The elevated temperature sign must be displayed on each side and each end of the large means of containment next to each primary class placard for the dangerous goods or, if there is a subsidiary class placard, next to the subsidiary class placard.</p> |  |