

Classifications and thresholds for hazardous substances

If one or more of the hazardous substances listed are present in your building in a total amount that exceeds the threshold quantities prescribed in schedule 3 of the Fire and Emergency New Zealand (Fire Safety, Evacuation Procedures, and Evacuation Schemes) Regulations 2018, then an evacuation scheme is required for your building under the Fire and Emergency New Zealand Act 2017.

More information about hazardous substance classification is available from your supplier, the manufacturer, a test certifier or the Environmental Protection Authority [website](#).

Property and state	Classifications	Threshold quantity	Common example(s)
Explosive	1.1 or 1.2	0kg	Detonators Blasting materials Black powder
	1.3	10kg	Marine distress flares Signalling devices Reloading (smokeless) powder
	1.4, 1.5 or 1.6	20kg	Ammunition Christmas crackers and party poppers Retail fireworks
Flammable (gas)	2.1.1A (other than LPG)	30kg or 30m ³	Acetylene Hydrogen gas
	2.1.1A (LPG only)	100kg or 60m ³	LPG
	2.1.1B	100kg or 60m ³	Ammonia
	2.1.2A	300L	Aerosols; some fly sprays and spray paints
Flammable (liquid)	3.1A	15L	Petrol
	3.1B	100L	Methanol Ethanol
	3.1C or 3.1D	1,000L	Kerosene Ethanol
	3.2A, 3.2B or 3.2C	10L	Liquid desensitised explosive
Flammable (solid – readily combustible)	4.1.1A	10kg	Titanium hydride (used in pyrotechnics, ceramics, metal industry, making magnets and a range of industrial processes)
	4.1.1B	100kg	Paraformaldehyde Champhor
Flammable (solid – self-reactive)	4.1.2A or 4.1.2B	5kg or 5L	
	4.1.2C or 4.1.2D	10kg or 10L	Lithium azide
	4.1.2E, 4.1.2F or 4.1.2G	20kg or 20L	
Flammable (solid – desensitised explosive)	4.1.3A, 4.1.3B or 4.1.3C	10kg	

Property and state	Classifications	Threshold quantity	Common example(s)
Flammable (substance – spontaneously combustible)	4.2A	10kg or 10L	White phosphorus
	4.2B	100kg or 100L	Magnesium powder Aluminium powder (uncoated)
	4.2C	1,000kg or 1,000L	
Flammable (solid – dangerous when wet)	4.3A	10kg	Magnesium powder Calcium carbide Solid sodium Lithium hydride
	4.3B	100kg	
	4.3C	1,000kg	
Capacity to oxidise (liquid or solid)	5.1.1A	5kg	Hydrogen peroxide >60% concentration in solution
	5.1.1B	50kg	Calcium hypochlorite Sodium hypochlorite Potassium nitrate
	5.1.1C	500kg or 10L	Nitric acid magnesium salt Ammonium nitrite
Capacity to oxidise (gas)	5.1.2A	0.5kg or 2.5m ³	Chlorine gas Oxygen Nitrous oxide
Organic peroxides	5.2A, 5.2B, 5.2C, 5.2D, 5.2E or 5.2F	10kg	Dibenzoyl peroxide (used in polymerisation of acrylates and resins) Other examples are used in making fibreglass, resin, polyester, and silicone products
Toxic (solid or liquid)	6.1A, 6.1B or 6.1C	10kg or 10L	Pesticides (paraquat) Timber treatment chemicals Cyanide and based baits Fuming sulphuric acid
Toxic (gas)	6.1A, 6.1B or 6.1C	0.5kg or 2.5m ³	Fumigants (methyl bromide, chloropicrin) Chlorine gas Ozone
Toxic (solid or liquid)	6.1D	100kg	Antifouling paints Pesticides including those available to the general public Solvents
Corrosive (solid or liquid)	8.1A or 8.2A	10kg or 10L	Potassium hydroxide (potash) Concentrated sodium hydroxide (caustic soda) Acetic acid >10% in solution
Corrosive (gas)	8.1A or 8.2A	0.5kg or 0.25m ³	Hydrogen chloride gas

Property and state	Classifications	Threshold quantity	Common example(s)
Corrosive (solid or liquid)	8.2B	100kg or 100L	Potassium hydroxide (potash) Concentrated sodium hydroxide (caustic soda) Acetic acid >80% in solution Hydrogen chloride gas (8.2B)
Corrosive (gas)	8.2B	0.5kg or 0.25m ³	Ammonia
Corrosive (solid, liquid or gas)	8.2C or 8.3A	500kg or 500L	Household cleaners Cosmetics Pesticides Paints etc. Potassium hydroxide (potash), Concentrated sodium hydroxide (caustic soda) Acetic acid >10% in solution Ammonia gas Hydrogen chloride gas

Infectious and radioactive substances

If any of the substances listed are present in your building, then an evacuation scheme is required for your building under the Fire and Emergency New Zealand Act 2017.

Substance property	Hazard	Threshold quantity
Infectious	Risk Group 3 microorganisms as defined in AS/NZS 2243.3:2002 Safety in laboratories – Microbiological aspects and containment facilities.	Any amount
Ionising radioactive material	Category 1, 2 or 3 radionuclide as listed in Table 2 of Appendix 1 of International Atomic Energy Agency Safety Standards Series No RS-G-1.9 Categorization of Radioactive Sources.	Any amount