POTENTIAL HAZARDS OF CLASS 1 – EXPLOSIVES

Health Hazards
For those Divisions and Compatibility Groups acceptable for carriage by air, little immediate health hazard.

Emergency Action
Should any explosives consignment become involved in any type of incident or should a fire or explosion occur:
- try to prevent the fire reaching the explosive, but if unable to do so;
- evacuate the area (recommend 1 km clear);
- call police/fire service;
- administer first aid and call ambulance (as necessary); and
- DO NOT RE-ENTER the area until it is declared safe by the controlling authority (i.e. police or fire service).

POTENTIAL HAZARDS OF CLASS 2 – GASES

Fire & Explosion
Explosive failure of the containing cylinders due to damage or heat or flames. Leakage of contents

Health Hazards
Poisoning disabling or suffocation from escaping gas. Burns to skin and eyes from gases, especially from gases in deeply refrigerated liquid (cryogenic) form. Materials may ignite in an oxygen spill.

Emergency Action
Keep unnecessary people away. Wear protective clothing if practical, wear self contained breathing apparatus where necessary (poisonous, noxious or suffocating gas). Wear protective clothing against cryogenic liquids - do not touch spilled liquid. Avoid rough handling of cylinders that may aggravate the situation. Do not smoke or expose flammable gases to any source of ignition.

Fire
All types of fire extinguisher are acceptable, however, BCF would be most effective against a small escaping gas fire. Large fires require a water spray or fog.

First Aid
Remove victim to fresh air as soon as practical. Remove contaminated clothing. If breathing is difficult, give oxygen. Keep victim quiet and maintain normal body temperature. Treat any injuries according to their nature. Seek professional medical advice.

POTENTIAL HAZARDS OF CLASS 3 - FLAMMABLE LIQUIDS

Fire & Explosion
May be ignited by heat, sparks and flames. Flammable vapour may spread away from spill. Container may explode in heat or fire. Vapour explosion hazard indoors, outdoors or in sewers. Run off to sewer may create fire or explosion hazard.

Health Hazards
Vapours may cause dizziness or suffocation. Contact may irritate or burn skin and eyes. Fire may produce irritating or poisonous gases.

Emergency Action
Keep unnecessary people away. Wear self contained breathing apparatus and if possible full protective clothing. Isolate the hazard and deny entry. As far as practical stay clear of smoke and fumes.

Fire
Move containers that are exposed to flames if this can be done without risk. If practical, cool containers that are exposed to flames with water until well after the fire is out. Avoid spreading any flammable liquid.
Small Fires: Dry chemicals, BCF, CO2, foam or water spray
Large Fires: Foam, water spray or fog.
POTENTIAL HAZARDS OF VARIOUS SUBSTANCES

Spills or Leakage
No flares, smoking or flames in hazard area. Stop leak if you can do it without risk. Use water spray to reduce vapours.
Large Spills: Dyke far ahead of spill for later disposal.
Small Spills: Take up with sand, or other non-combustible absorbent material, then flush area with water.

First Aid
Remove victim to fresh air as soon as practical. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact with material, immediately flush skin and eyes with running water for at least 15 minutes. Remove and isolate contaminated clothing and shoes.
Seek professional medical care.

POTENTIAL HAZARDS OF CLASS 4 - FLAMMABLE SOLIDS

Fire & Explosion
Will burn. May be ignited by heat, sparks and flames. May burn rapidly with flare/burning effect. May produce flammable gases or ignite with the action of water.

Health Hazards
Little immediate health hazard. Fire may produce irritating or poisonous gases. Contact may cause burns to skin and eyes.

Emergency Action
Keep unnecessary people away. Wear self contained breathing apparatus and if possible full protective clothing. Isolate the hazard and deny entry. As far as practical stay clear of smoke and fumes.

Fire
Keep containers cool. Move containers from fire area if this can be done without risk. Do not use water on magnesium fire? use dry sand. Do not use water on goods displaying DANGEROUS WHEN WET label.
Small Fires: Dry chemicals, sand, foam, BCF, water spray.
Large Fires: Water spray, fog or foam.

Spills or Leakage
No flares, smoking or flames in hazard area. Do not touch spilled material.
Large Spills: Wet down with water and die for later disposal. If "DANGEROUS WHEN WET" cover with dry sand or other dry non-combustible material.
Small Dry Spills: Shovel into dry containers and cover, move containers; then flush area with water.

First Aid
Remove victim to fresh air as soon as practical. If breathing is difficult, give oxygen. In case of contact with material, immediately flush skin and eyes with running water for at least 15 minutes. Remove and isolate contaminated clothing and shoes. Seek professional medical care.
POTENTIAL HAZARDS OF VARIOUS SUBSTANCES

POTENTIAL HAZARDS OF CLASS 5 - OXIDISING SUBSTANCES AND ORGANIC PEROXIDES

Fire & Explosion
May ignite combustibles (wood, paper, oil, etc.) Reaction with fuels may be violent. Run off to sewer may create fire or explosion hazard.

Health Hazards
Contact may cause burns to skin and eyes. Vapours or dust may be irritating. Fire may produce irritating or poisonous gases.

Emergency Action
Keep unnecessary people away. Isolate hazard area and deny entry. Wear self contained breathing apparatus and full protective clothing, if available.

Fire
Move containers from fire area if you can do it without risk. Cool containers that are exposed to flames with water from the side until well after fire is out.
Small Fires: Dry chemicals, BCF, CO2, water spray or foam.
Large Fires: Water spray, fog or foam.

Spills or Leakage
Do not touch spilled material. Keep combustibles (wood, paper, oil, etc.) away from spilled material.
Large Spills: Dyke far ahead of spill for later disposal.
Small Spill: Take up with sand, earth or other non combustible absorbent material.
Small Dry Spills: Shovel into dry containers and cover, move containers; then flush area with water.

First Aid
Remove victim to fresh air as soon as practical. If breathing is difficult, give oxygen. Remove and isolate contaminated clothing and shoes. In case of contact with material, immediately flush skin or eyes with running water for at least 15 minutes. Seek professional medical care.

POTENTIAL HAZARDS OF CLASS 6 - TOXIC AND INFECTIOUS SUBSTANCES

Poisonous Liquids
May be fatal if inhaled, swallowed or absorbed through skin. Contact may cause burns to skin and eyes. Run off from fire control or dilution water may cause pollution.

Infectious Substances
Dangerous to humans and / or animals.

Fire & Explosion
Some of these materials may burn but do not ignite readily. Cylinder may explode in heat of fire.

Emergency Action
DO NOT attempt to control or clean up yourself. Keep unnecessary people away. Isolate hazard area and deny entry. As far as practical, stay clear of smoke and fumes by remaining on the upwind side of the spill. Call in the appropriate emergency agency.
NOTE: Contacting the Police will usually be the first action to take, however, within the Health Department in every State there will be a "Competent Authority", usually the Quarantine Officer, who will be called in to deal with the emergency. The Police will contact these persons.
Wear self contained breathing apparatus (preferably of positive pressure type) and, if practical, full protective clothing.
POTENTIAL HAZARDS OF VARIOUS SUBSTANCES

Fire
Move containers from fire area if you can do it without risk.
Small Fires: Dry chemicals, CO2, water spray, foam or BCF.
Large Fires: Water spray, fog or foam.

Spills or Leakage
Do not touch spilled material. Stop leak if you can do it without risk. Use water spray to reduce vapours or airborne dust.
Large Spills: Dyke far ahead of spill for later disposal.
Small Spills: Take up with sand or other non-combustible absorbent material, then flush area with water.
Small Dry Spills: Shovel into dry containers and cover, move containers, then flush area with water.

First Aid
Remove victim to fresh air, call emergency medical care. If not breathing, give artificial respirations. If breathing is difficult, give oxygen. In case of contact with material, immediately flush skin or eyes with running water for at least 15 minutes. Speed in removing material from skin is of extreme importance. Remove and isolate contaminated clothing and shoes. Keep victim quiet and maintain normal body temperature. Effects may be delayed, keep victim under observation. Seek professional medical advice.

POTENTIAL HAZARDS OF CLASS 7 - RADIOACTIVE MATERIALS

Degree of hazard will vary greatly depending on type and quantity of radioactive material. External radiation from unshielded radioactive material. Internal radiation from inhalation, ingestion or skin absorption. Run off from fire control or dilution water may cause pollution. Some of these materials may burn but do not ignite readily.

Emergency Action
Do not, under any circumstances, attempt clean up of area. Rescue injured persons and administer first aid. Keep at least 50 metres upwind from the contaminated area. Enter spill area only to save life; limit entry to shortest possible time.
Call the Federal Police (if possible) or State Police and have them advise the Competent Authority direct as soon as possible giving details of the Radioactive material being transported from the Shipper's Declaration and follow any instructions subsequently issued.
Detain persons and equipment exposed to radioactivity until instruction from or arrival of Radiation Authority.

Fire
Do not move damaged containers; move undamaged containers out of fire zone.
Small Fires: Dry chemicals, BCF, CO2, water spray or foam.
Large Fires: Water spray or fog (flooding amounts). Fight fire from maximum distance.

Spills and Leakage
Do not touch damaged containers or spilled material.
Damage to outer container may not affect primary inner container.
Large Spills: Dyke far ahead of spill for later disposal.
Small Spills: Take up with sand, earth or other non combustible absorbent material.

First Aid
Call emergency medical care. If not affecting injury, remove and isolate clothing and shoes; wrap victim in blanket before transporting. If not injured, remove and isolate contaminated clothing and shoes; shower victim with soap and water. Except for the injured, detail persons and equipment exposed to radioactivity until instruction from or arrival of Radiation Authority. Advise medical care personnel that injured persons may be contaminated by radioactivity.
POTENTIAL HAZARDS OF VARIOUS SUBSTANCES

POTENTIAL HAZARDS OF CLASS 8 - CORROSIVES

Can cause severe damage to skin and eyes. If inhaled, may be dangerous. Can materially damage other freight or the means of transport. Fire may produce irritation of poisonous gases. May react with other materials to form flammable or explosive gases or noxious fumes. May cause ignition or combustibles (wood, paper, oil, etc.)

Emergency Action
Keep unnecessary people away. Avoid breathing smoke and fumes. Isolate hazard area and deny entry. As far as practical, stay clear of smoke and fumes. Wear self contained breathing apparatus and, if practical, full protective clothing.

Fire
Move containers from fire area if you can do it without risk. Cool containers that are exposed to flames with water from the side until well after fire is out. Some of these materials may react violently with water. Small Fires: Dry Chemicals, CO2, water spray, foam or BCF. Large Fires: Water spray, fog or foam.

Spills or Leakage
Do not touch spilled material. Stop leak if you can do it without risk. Large Spills: Contain spill far ahead of spill for later disposal. Small Spills: Take up with sand or other non-combustible absorbent material, then flush area with water.

First Aid
Remove victim to fresh air as soon as practical. If breathing is difficult, give oxygen. Remove and isolate contaminated clothing and shoes. In case of contact with material, immediately flush skin or eyes with running water for at least 15 minutes. Seek professional medical care.

POTENTIAL HAZARDS OF CLASS 9 - MISCELLANEOUS DANGEROUS GOODS

The following are some Class 9 items with their hazards and emergency procedures.

MAGNETISED MATERIAL
Can affect instruments especially magnetic compasses. Negligible hazard under emergency conditions.

Miscellaneous articles and substances

Ammonium Nitrate Fertiliser
When mixed with hydrocarbon fuel (such as kerosene) it can act as an explosive, however, generally requires another explosive to ignite it. Precautions as for Class 1 - EXPLOSIVES.

Asbestos (All Types)
Fine mineral fibres can lodge in the lungs and cause lung disease (may be many years later). Keep unnecessary people away. Isolate hazard area and deny entry. Wear self contained breathing apparatus or filter mask. If persons are affected, seek professional medical care.

Dry Ice (Solid CO2)
Dry Ice is at a temperature of approximately - 80oC and can cause severe damage to skin by freezing. Dry Ice "evaporates" to form an invisible, odourless heavy gas that can displace the air and cause suffocation of humans and animals. Avoid handling - wear protective clothing. Segregate Dry Ice from animals and humans. Wear self contained breathing apparatus in confined spaces suspected of being contaminated. Encourage ventilation of confined spaces. Remove victim to fresh air as soon as practical. If breathing is difficult, give oxygen. Seek professional medical advice and care.
POTENTIAL HAZARDS OF VARIOUS SUBSTANCES

Life rafts, Life jackets
Contain bottles of compressed gas. If accidentally inflated, life rafts can occupy very large volumes and exert very large forces on aircraft and other structure. Keep unnecessary people away. Take care regarding accidental inflation of raft or explosion of bottles.

Polymeric Beads, Expandable
Raw pellets will expand if subjected to heat generating considerable forces, and they give off toxic gases in the process. If the beads are involved in a fire toxic fumes will be emitted.

Tyre Assemblies
Can be pressurised, could explode, especially under the action of heat and flames. Treat as for compressed gases (Class 2). Approach tyre assemblies with great care.

Vehicles Self Propelled
Wheel chairs. Could, but should not contain fuel (flammable liquid) - treat as for "flammable liquid" Class 3. Could contain batteries which could leak or spill electrolyte - treat as for "corrosive", Class 8. Could contain batteries which could short circuit and ignite flammable gases or vapours; be aware of this hazard if these are also present. Keep unnecessary people away.

Zinc dithionite (Zinc hydrosulphite)
Can give off poisonous and corrosive gases under the action of heat. Treat as for "Gases" - Class 2 and/or "Corrosives" - Class 8, as appropriate.