GUIDE 154  SUBSTANCES - TOXIC AND/OR CORROSIVE (NON-COMBUSTIBLE)

POTENTIAL HAZARDS

HEALTH

• TOXIC; inhalation, ingestion or skin contact with material may cause severe injury or death.
• Contact with molten substance may cause severe burns to skin and eyes.
• Avoid any skin contact.
• Effects of contact or inhalation may be delayed.
• Fire may produce irritating, corrosive and/or toxic gases.
• Runoff from fire control or dilution water may be corrosive and/or toxic and cause environmental contamination.

FIRE OR EXPLOSION

• Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
• Some are oxidizers and may ignite combustibles (wood, paper, oil, clothing, etc.).
• Contact with metals may evolve flammable hydrogen gas.
• Containers may explode when heated.
• For electric vehicles or equipment, GUIDE 147 (lithium ion batteries) or GUIDE 138 (sodium batteries) should also be consulted.

PUBLIC SAFETY

• CALL 911. Then call emergency response telephone number on shipping paper. If shipping paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
• Keep unauthorized personnel away.
• Stay upwind, uphill and/or upstream.
• Ventilate closed spaces before entering, but only if properly trained and equipped.

PROTECTIVE CLOTHING

• Wear positive pressure self-contained breathing apparatus (SCBA).
• Wear chemical protective clothing that is specifically recommended by the manufacturer when there is NO RISK OF FIRE.
• Structural firefighters’ protective clothing provides thermal protection but only limited chemical protection.

EVACUATION

Immediate precautionary measure

• Isolate spill or leak area in all directions for at least 50 meters (150 feet) for liquids and at least 25 meters (75 feet) for solids.

Spill

• For highlighted materials: see Table 1 - Initial Isolation and Protective Action Distances.
• For non-highlighted materials: increase the immediate precautionary measure distance, in the downwind direction, as necessary.

Fire

• If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

In Canada, an Emergency Response Assistance Plan (ERAP) may be required for this product. Please consult the shipping paper and/or the ERAP Program Section (page 390).
**EMERGENCY RESPONSE**

### FIRE

**Small Fire**
- Dry chemical, CO₂ or water spray.

**Large Fire**
- Dry chemical, CO₂, alcohol-resistant foam or water spray.
- If it can be done safely, move undamaged containers away from the area around the fire.
- Dike runoff from fire control for later disposal.

**Fire Involving Tanks or Car/Trailer Loads**
- Fight fire from maximum distance or use unmanned master stream devices or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

### SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames) from immediate area.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- DO NOT GET WATER INSIDE CONTAINERS.

### FIRST AID

- Call 911 or emergency medical service.
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
- Move victim to fresh air if it can be done safely.
- Give artificial respiration if victim is not breathing.
- **Do not perform mouth-to-mouth resuscitation if victim ingested or inhaled the substance; wash face and mouth before giving artificial respiration. Use a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim calm and warm.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.