

**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 pollution.

**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 EMERGENCY RESPONSE Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- As an 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.
- Keep unauthorized personnel away.
- Stay upwind, uphill and/or upstream.
- Ventilate enclosed areas.

**PROTECTIVE CLOTHING**

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

**EVACUATION**

**Spill**

- See [Table 1 - Initial Isolation and Protective Action Distances](#) for highlighted materials. For non-highlighted materials, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

**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 document and/or the ERAP Program Section (page 391).

**EMERGENCY RESPONSE**

**FIRE**

**Small Fire**

- Dry chemical, CO<sub>2</sub> or water spray.

**Large Fire**

- Dry chemical, CO<sub>2</sub>, alcohol-resistant foam or water spray.
- Move containers from fire area if you can do it without risk.
- Dike fire-control water for later disposal; do not scatter the material.

**Fire involving Tanks or Car/Trailer Loads**

- Fight fire from maximum distance or use unmanned hose holders 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 in 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**

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
- Move victim to fresh air.
- Call 911 or emergency medical service.
- Give artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of 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.