PROTECTIVE CLOTHING

HEALTH

TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns or death.

FIRE OR EXPLOSION

• Combustible material: may burn but does not ignite readily.
• Substance will react with water (some violently) releasing flammable, toxic or corrosive gases and runoff.
• When heated, vapors may form explosive mixtures with air: indoors, outdoors and sewers explosion hazards.
• Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
• Vapors may travel to source of ignition and flash back.
• Contact with metals may evolve flammable hydrogen gas.
• Containers may explode when heated or if contaminated with water.

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
- Note: Most foams will react with the material and release corrosive/toxic gases.
- Small Fire
  - CO₂, dry chemical, dry sand, alcohol-resistant foam.
- Large Fire
  - Water spray, fog or alcohol-resistant foam.
- **FOR CHLOROSILANES, DO NOT USE WATER:** use AFFF alcohol-resistant medium-expansion foam.
  - Move containers from fire area if you can do it without risk.
  - Use water spray or fog; do not use straight streams.
- 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).
- All equipment used when handling the product must be grounded.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- A vapor-suppressing foam may be used to reduce vapors.
- **FOR CHLOROSILANES,** use AFFF alcohol-resistant medium-expansion foam to reduce vapors.
- **DO NOT GET WATER on spilled substance or inside containers.**
  - Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
  - Prevent entry into waterways, sewers, basements or confined areas.
- Small Spill
  - Cover with DRY earth, DRY sand or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
  - Use clean, non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

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.