**ERG2000** 

# GUIDE SUBSTANCES - WATER-REACTIVE (EMITTING FLAMMABLE GASES)

# **POTENTIAL HAZARDS**

## FIRE OR EXPLOSION

- Produce flammable gases on contact with water.
- May ignite on contact with water or moist air.
- Some react vigorously or explosively on contact with water.
- May be ignited by heat, sparks or flames.
- · May re-ignite after fire is extinguished.
- Some are transported in highly flammable liquids.
- Runoff may create fire or explosion hazard.

## HEALTH

- Inhalation or contact with vapors, substance, or decomposition products may cause severe
  injury or death.
- May produce corrosive solutions on contact with water.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

# **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.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- · Keep out of low areas.
- · Ventilate the area before entry.

## PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

# EVACUATION

# Large Spill

• Consider initial downwind evacuation for at least 250 meters (800 feet).

## 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.

# **EMERGENCY RESPONSE**

#### FIRE

· DO NOT USE WATER OR FOAM.

## Small Fires

· Dry chemical, soda ash, lime or sand.

## Large Fires

- DRY sand, dry chemical, soda ash or lime or withdraw from area and let fire burn.
- Move containers from fire area if you can do it without risk.

## Magnesium Fires

•DRY sand, sodium chloride powder, graphite powder or Met-L-X® powder.

## Lithium Fires

• DRY sand, sodium chloride powder, graphite powder, copper powder or Lith-X® powder.

# 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 or walk through spilled material.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- DO NOT GET WATER on spilled substance or inside containers.

Small Spills • Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

• Dike for later disposal; do not apply water unless directed to do so.

**Powder Spills** • Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

 DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

### FIRST AID

- Move victim to fresh air. Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- $\bullet \ \ Remove \ and \ isolate \ contaminated \ clothing \ and \ shoes.$
- In case of contact with substance, wipe from skin immediately; flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.