GUIDE ADSORBED GASES - FLAMMABLE OR OXIDIZING 174

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- Some gases will be ignited by heat, sparks or flames but NOT readily due to low transportation pressure.
- Substance does not burn but will support combustion.
- · Vapors may travel to source of ignition and flash back.
- Cylinders exposed to fire may vent and release flammable gas through pressure relief devices.
- Containers may explode when exposed to prolonged direct flame impingement.

HEALTH

- · Vapors may cause dizziness or asphyxiation without warning.
- Some may be irritating if inhaled at high concentrations.
- · Contact with gas may cause burns and injury.
- · Fire may produce irritating and/or toxic gases.

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 for at least 100 meters (330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind, uphill and/or upstream.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Ventilate closed spaces before entering.

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 800 meters (1/2 mile).

Fire

 If several small packages (rail or trailer) are involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

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EMERGENCY RESPONSE

FIRE

- DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.
- · Use extinguishing agent suitable for type of surrounding fire.

Small Fire

Dry chemical or CO₂.

Large Fire

- · Water spray or fog.
- · Move containers from fire area if you can do it without risk.
- · Damaged cylinders should be handled only by specialists.

Fire involving Several Small Packages (rail or trailer)

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- · Do not direct water at source of leak or safety devices.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- For flammable gases, ELIMINATE all ignition sources (no smoking, flares, sparks or flames) from immediate area.
- For oxidizing substances, keep combustibles (wood, paper, oil, etc.) away from spilled material.
- All equipment used when handling the product must be grounded.
- 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 direct water at spill or source of leak.
- · Prevent spreading of vapors through sewers, ventilation systems and confined areas.
- · Ventilate the area.
- · Isolate area until gas has dispersed.

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.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin.
- · Keep victim calm and warm.