POTENTIAL HAZARDS

HEALTH

- **TOXIC; may be fatal if inhaled or absorbed through skin.**
- Vapors may be irritating and/or corrosive.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause environmental contamination.

FIRE OR EXPLOSION

- Some may burn but none ignite readily.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Cylinders exposed to fire may vent and release toxic and/or corrosive gas through pressure relief devices.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

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.
- Many gases are heavier than air and will spread along the ground and collect in low or confined areas (sewers, basements, tanks, etc.).
- 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 for at least 100 meters (330 feet) in all directions.

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 or CO_2.

Large Fire

- Water spray, fog or regular foam.
- Do not get water inside containers.
- If it can be done safely, move undamaged containers away from the area around the fire.
- Damaged cylinders should be handled only by specialists.

Fire Involving Tanks

- Fight fire from maximum distance or use unmanned master stream devices 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; icing may occur.
- 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

- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- 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.
- Isolate area until gas has dispersed.

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 liquefied gas, thaw frosted parts with lukewarm water.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim calm and warm.
- Keep victim under observation.
- Effects of contact or inhalation may be delayed.

TABLE 1 - INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

			SMALL SPILLS (From a small package or small leak from a large package)						LARGE SPILLS (From a large package or from many small packages)					
			First ISOLATE in all Directions		Then PROTECT persons Downwind during				First ISOLATE in all Directions		Then PROTECT persons Downwind during			
ID No.	**Guide**	**NAME OF MATERIAL**	Meters	(Feet)	**DAY Kilometers (Miles)**		**NIGHT Kilometers (Miles)**		Meters	(Feet)	**DAY Kilometers (Miles)**		**NIGHT Kilometers (Miles)**	
1062	**123**	Methyl bromide	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	150 m	(500 ft)	0.3 km	(0.2 mi)	0.8 km	(0.5 mi)
1581	**123**	Chloropicrin and Methyl bromide mixture	30 m	(100 ft)	0.1 km	(0.1 mi)	0.6 km	(0.4 mi)	300 m	(1000 ft)	2.1 km	(1.3 mi)	5.9 km	(3.7 mi)
1581	**123**	Methyl bromide and Chloropicrin mixture	30 m	(100 ft)	0.1 km	(0.1 mi)	0.6 km	(0.4 mi)	300 m	(1000 ft)	2.1 km	(1.3 mi)	5.9 km	(3.7 mi)
1612	**123**	Compressed gas and hexaethyl tetraphosphate mixture	100 m	(300 ft)	0.8 km	(0.5 mi)	2.7 km	(1.7 mi)	400 m	(1250 ft)	3.5 km	(2.2 mi)	8.1 km	(5.1 mi)
1612	**123**	Hexaethyl tetraphosphate and compressed gas mixture	100 m	(300 ft)	0.8 km	(0.5 mi)	2.7 km	(1.7 mi)	400 m	(1250 ft)	3.5 km	(2.2 mi)	8.1 km	(5.1 mi)
1955	**123**	Compressed gas, poisonous, n.o.s.	100 m	(300 ft)	0.5 km	(0.3 mi)	2.5 km	(1.6 mi)	1000 m	(3000 ft)	5.7 km	(3.6 mi)	10.1 km	(6.3 mi)
1955	**123**	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	100 m	(300 ft)	0.5 km	(0.3 mi)	2.5 km	(1.6 mi)	1000 m	(3000 ft)	5.7 km	(3.6 mi)	10.1 km	(6.3 mi)
1955	**123**	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	30 m	(100 ft)	0.2 km	(0.1 mi)	0.9 km	(0.6 mi)	400 m	(1250 ft)	2.3 km	(1.4 mi)	5.1 km	(3.2 mi)
1955	**123**	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.3 km	(0.2 mi)	150 m	(500 ft)	1.0 km	(0.6 mi)	2.9 km	(1.8 mi)
1955	**123**	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.2 km	(0.1 mi)	150 m	(500 ft)	0.8 km	(0.5 mi)	2.0 km	(1.3 mi)
1955	**123**	Compressed gas, toxic, n.o.s.	100 m	(300 ft)	0.5 km	(0.3 mi)	2.5 km	(1.6 mi)	1000 m	(3000 ft)	5.7 km	(3.6 mi)	10.1 km	(6.3 mi)
1955	**123**	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone A)	100 m	(300 ft)	0.5 km	(0.3 mi)	2.5 km	(1.6 mi)	1000 m	(3000 ft)	5.7 km	(3.6 mi)	10.1 km	(6.3 mi)
1955	**123**	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone B)	30 m	(100 ft)	0.2 km	(0.1 mi)	0.9 km	(0.6 mi)	400 m	(1250 ft)	2.3 km	(1.4 mi)	5.1 km	(3.2 mi)
1955	**123**	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone C)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.3 km	(0.2 mi)	150 m	(500 ft)	1.0 km	(0.6 mi)	2.9 km	(1.8 mi)
1955	**123**	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.2 km	(0.1 mi)	150 m	(500 ft)	0.8 km	(0.5 mi)	2.0 km	(1.3 mi)
1955	**123**	Organic phosphate compound mixed with compressed gas	100 m	(300 ft)	1.0 km	(0.7 mi)	3.4 km	(2.1 mi)	500 m	(1500 ft)	4.4 km	(2.7 mi)	9.6 km	(6.0 mi)
1955	**123**	Organic phosphate mixed with compressed gas	100 m	(300 ft)	1.0 km	(0.7 mi)	3.4 km	(2.1 mi)	500 m	(1500 ft)	4.4 km	(2.7 mi)	9.6 km	(6.0 mi)
1955	**123**	Organic phosphorus compound mixed with compressed gas	100 m	(300 ft)	1.0 km	(0.7 mi)	3.4 km	(2.1 mi)	500 m	(1500 ft)	4.4 km	(2.7 mi)	9.6 km	(6.0 mi)
1967	**123**	Insecticide gas, poisonous, n.o.s.	100 m	(300 ft)	1.0 km	(0.7 mi)	3.4 km	(2.1 mi)	500 m	(1500 ft)	4.4 km	(2.7 mi)	9.6 km	(6.0 mi)
1967	**123**	Insecticide gas, toxic, n.o.s.	100 m	(300 ft)	1.0 km	(0.7 mi)	3.4 km	(2.1 mi)	500 m	(1500 ft)	4.4 km	(2.7 mi)	9.6 km	(6.0 mi)
1967	**123**	Parathion and compressed gas mixture	100 m	(300 ft)	1.0 km	(0.7 mi)	3.4 km	(2.1 mi)	500 m	(1500 ft)	4.4 km	(2.7 mi)	9.6 km	(6.0 mi)
2191	**123**	Sulfuryl fluoride	30 m	(100 ft)	0.1 km	(0.1 mi)	0.5 km	(0.3 mi)	400 m	(1250 ft)	2.2 km	(1.4 mi)	5.3 km	(3.3 mi)
2191	**123**	Sulphuryl fluoride	30 m	(100 ft)	0.1 km	(0.1 mi)	0.5 km	(0.3 mi)	400 m	(1250 ft)	2.2 km	(1.4 mi)	5.3 km	(3.3 mi)
3162	**123**	Liquefied gas, poisonous, n.o.s.	100 m	(300 ft)	0.5 km	(0.3 mi)	2.5 km	(1.6 mi)	1000 m	(3000 ft)	5.7 km	(3.6 mi)	10.1 km	(6.3 mi)
3162	**123**	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	100 m	(300 ft)	0.5 km	(0.3 mi)	2.5 km	(1.6 mi)	1000 m	(3000 ft)	5.7 km	(3.6 mi)	10.1 km	(6.3 mi)
3162	**123**	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	30 m	(100 ft)	0.2 km	(0.1 mi)	0.9 km	(0.6 mi)	400 m	(1250 ft)	2.3 km	(1.4 mi)	5.1 km	(3.2 mi)
3162	**123**	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.3 km	(0.2 mi)	150 m	(500 ft)	1.0 km	(0.6 mi)	2.9 km	(1.8 mi)
3162	**123**	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.2 km	(0.1 mi)	150 m	(500 ft)	0.8 km	(0.5 mi)	2.0 km	(1.3 mi)
3162	**123**	Liquefied gas, toxic, n.o.s.	100 m	(300 ft)	0.5 km	(0.3 mi)	2.5 km	(1.6 mi)	1000 m	(3000 ft)	5.7 km	(3.6 mi)	10.1 km	(6.3 mi)
3162	**123**	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)	100 m	(300 ft)	0.5 km	(0.3 mi)	2.5 km	(1.6 mi)	1000 m	(3000 ft)	5.7 km	(3.6 mi)	10.1 km	(6.3 mi)
3162	**123**	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)	30 m	(100 ft)	0.2 km	(0.1 mi)	0.9 km	(0.6 mi)	400 m	(1250 ft)	2.3 km	(1.4 mi)	5.1 km	(3.2 mi)
3162	**123**	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.3 km	(0.2 mi)	150 m	(500 ft)	1.0 km	(0.6 mi)	2.9 km	(1.8 mi)
3162	**123**	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.2 km	(0.1 mi)	150 m	(500 ft)	0.8 km	(0.5 mi)	2.0 km	(1.3 mi)
3539	**123**	Articles containing toxic gas, n.o.s.	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.4 km	(0.3 mi)