GUIDE 125 GASES - TOXIC AND/OR CORROSIVE

POTENTIAL HAZARDS

HEALTH

- **TOXIC and/or CORROSIVE; may be fatal if inhaled, ingested or absorbed through skin.**
- Vapors are extremely irritating and 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.
- Some of these materials may react violently with water.
- 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.
- For UN1005: Anhydrous ammonia, at high concentrations in confined spaces, presents a flammability risk if a source of ignition is introduced.

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 tank car or highway tank is 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.

EMERGENCY RESPONSE

FIRE

Small Fire

- Dry chemical or CO_2.

Large Fire

- Water spray, fog or regular foam.
- If it can be done safely, move undamaged containers away from the area around the fire.
- Do not get water inside containers.
- 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 in direct contact with flames.

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.
- Do not direct water at spill or source of leak.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Isolate area until gas has dispersed.

FIRST AID

Refer to the "General First Aid" section.

Specific First Aid:

- In case of contact with liquefied gas, only medical personnel should attempt thawing frosted parts.
- **In case of skin contact with hydrogen fluoride, anhydrous (UN1052)**, if calcium gluconate gel is available, rinse 5 minutes, then apply gel. Otherwise, continue rinsing until medical treatment is available.

In Canada, an Emergency Response Assistance Plan (ERAP) may be required for this product. Please consult the shipping paper and/or the "ERAP" section.

Table 1 of the Emergency Response Guidebook

			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	
				DAY	NIGHT		DAY	NIGHT
ID No.	Guide No.	Name of Material	Meters (Feet)	Km (Miles)	Km (Miles)	Meters (Feet)	Km (Miles)	Km (Miles)
1079	125	Sulfur dioxide	100m (300ft)	0.6km (0.4mi)	2.6km (1.6mi)	Refer to Table 3		

Table 3 of the Emergency Response Guidebook

			Then PROTECT persons Downwind during											
			DAY						NIGHT					
	First ISOLATE in all directions		Low Wind (<6 mph = <10 km/h)		Moderate Wind (6-12 mph = 10-20 km/h)		High Wind (>12 mph = >20 km/h)		Low Wind (<6 mph = <10 km/h)		Moderate Wind (6-12 mph = 10-20 km/h)		High Wind (>12 mph = >20 km/h)	
	Meters	Feet	Km	Miles	Km	Miles	Km	Miles	Km	Miles	Km	Miles	Km	Miles
Transport Container	**UN1079 Sulfur dioxide / Sulphur dioxide: Large Spills**													
Rail tank car	1000	3000	11.0+	7.0+	11.0+	7.0+	6.9	4.3	11.0+	7.0+	11.0+	7.0+	9.6	6.0
Highway tank truck or trailer	1000	3000	11.0+	7.0+	6.0	3.8	5.0	3.3	11.0+	7.0+	7.9	5.1	6.0	3.9
Multiple ton cylinders	500	1500	5.2	3.3	2.2	1.4	1.7	1.1	7.4	4.3	4.0	2.5	2.7	1.7
Multiple small cylinders or single ton cylinder	200	600	3.1	1.9	1.5	0.9	1.1	0.7	5.6	3.5	2.4	1.5	1.5	0.9