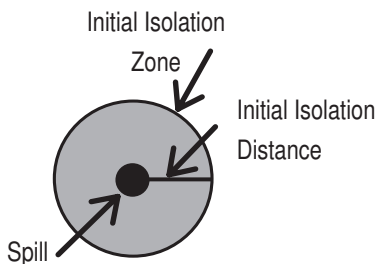


HOW TO USE TABLE 1 – INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

- (1) The responder should already have:
 - identified the material by its ID number and name (if you cannot find an ID number, use the Name of Material index in the blue-bordered pages to find that number);
 - confirmed that the material is highlighted in green in the yellow or blue-bordered pages. If not, Table 1 doesn't apply;
 - found the three-digit guide for the material, in order to consult emergency actions it recommends along with this table; and
 - **noted the wind direction**
- (2) Look in Table 1 (green-bordered pages) for the ID number and name of the material involved. Some ID numbers have more than one shipping name listed. Look for the specific name of the material. If you do not know the shipping name and Table 1 lists more than one name for the same ID number, use the entry with the largest distances.
- (3) Determine if the incident involves a SMALL or LARGE spill and if it is DAY or NIGHT. A SMALL SPILL consists of a release of 208 liters (55 US gallons) or less. This generally corresponds to a spill from a single small package (for example, a drum), a small cylinder, or a small leak from a large package. A LARGE SPILL consists of a release of more than 208 liters (55 US gallons). This usually involves a spill from a large package, or multiple spills from many small packages. DAY is any time after sunrise and before sunset. NIGHT is any time between sunset and sunrise.

- (4) Look up the INITIAL ISOLATION DISTANCE. This distance defines the radius of a zone (initial isolation zone) surrounding the spill in ALL DIRECTIONS. In this zone, protective clothing and respiratory protection is required. Evacuate the general public in a direction perpendicular to wind direction (crosswind) and away from the spill.

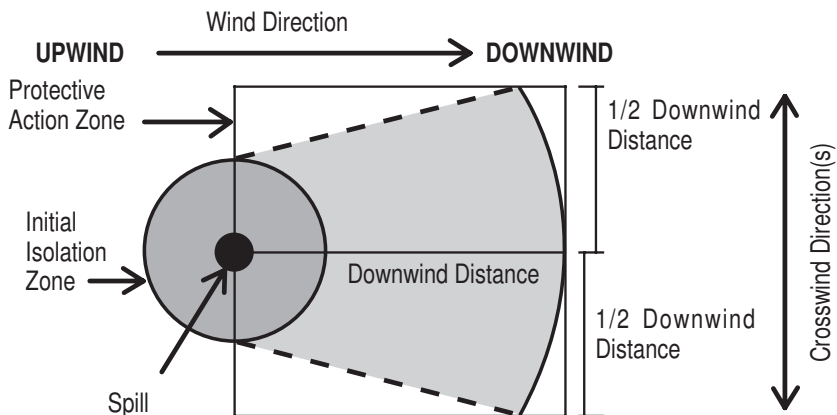


- (5) Look up the PROTECTIVE ACTION DISTANCE. For a given material, spill size, and whether day or night, Table 1 gives the downwind distance—in kilometers and miles—from the spill or leak source, for which you should consider protective actions. For practical purposes, the protective action zone (i.e., the area in which people are at risk of harmful exposure) is a square. Its length and width are the same as the downwind distance shown in Table 1. Protective actions are the

steps you take to preserve the health and safety of emergency responders and the public. People in this area should be evacuated and/or sheltered-in-place. Consult pages 289-291.

- (6) Initiate protective actions beginning with those closest to the spill site and working away in a downwind direction. When a water-reactive TIH (PIH in the US) producing material is spilled into a river or stream, the source of the toxic gas may move with the current or stretch from the spill point downstream for a large distance.

In the figure below, the spill is located at the center of the small black circle. The larger circle represents the initial isolation zone around the spill. The square (the protective action zone) is the area in which you should take protective actions.



Note 1: For factors that may change the protective action distances, see "Introduction to Green Tables" (page 286).

Note 2: When a product in Table 1 has the mention (when spilled in water), you can refer to Table 2 for the list of gases produced when these materials are spilled in water. The TIH gases indicated in Table 2 are for information purposes only.

For more information on the material, safety precautions and mitigation procedures, call the emergency response telephone number listed on the shipping paper or the appropriate response agency as soon as possible.

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)			
ID No.	Guide	NAME OF MATERIAL	First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		
				DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	
—	117	AC (when used as a weapon)	60 m (200 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	1000 m (3000 ft)	3.7 km (2.3 mi)	8.4 km (5.3 mi)	
—	154	Adamsite (when used as a weapon)	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)	
—	153	Buzz (when used as a weapon)	60 m (200 ft)	0.4 km (0.2 mi)	1.7 km (1.1 mi)	400 m (1250 ft)	2.2 km (1.4 mi)	8.1 km (5.0 mi)	
—	153	BZ (when used as a weapon)	60 m (200 ft)	0.4 km (0.2 mi)	1.7 km (1.1 mi)	400 m (1250 ft)	2.2 km (1.4 mi)	8.1 km (5.0 mi)	
—	159	CA (when used as a weapon)	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.3 mi)	100 m (300 ft)	0.5 km (0.4 mi)	2.6 km (1.6 mi)	
—	125	CG (when used as a weapon)	150 m (500 ft)	0.8 km (0.5 mi)	3.2 km (2.0 mi)	1000 m (3000 ft)	7.5 km (4.7 mi)	11.0+ km (7.0+ mi)	
—	125	CK (when used as a weapon)	30 m (100 ft)	0.2 km (0.2 mi)	1.4 km (0.9 mi)	300 m (1000 ft)	1.4 km (0.9 mi)	6.1 km (3.8 mi)	
—	153	CN (when used as a weapon)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.3 km (0.2 mi)	1.2 km (0.8 mi)	
—	153	CS (when used as a weapon)	30 m (100 ft)	0.1 km (0.1 mi)	0.6 km (0.4 mi)	100 m (300 ft)	0.4 km (0.3 mi)	1.9 km (1.2 mi)	
—	154	CX (when used as a weapon)	60 m (200 ft)	0.2 km (0.2 mi)	1.1 km (0.7 mi)	200 m (600 ft)	1.2 km (0.7 mi)	5.1 km (3.2 mi)	
—	151	DA (when used as a weapon)	30 m (100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	300 m (1000 ft)	1.9 km (1.2 mi)	7.5 km (4.7 mi)	
—	153	DC (when used as a weapon)	30 m (100 ft)	0.1 km (0.1 mi)	0.6 km (0.4 mi)	60 m (200 ft)	0.4 km (0.3 mi)	1.8 km (1.1 mi)	
—	154	DM (when used as a weapon)	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)	
—	125	DP (when used as a weapon)	30 m (100 ft)	0.2 km (0.1 mi)	0.7 km (0.4 mi)	200 m (600 ft)	1.0 km (0.7 mi)	2.4 km (1.5 mi)	
—	151	ED (when used as a weapon)	150 m (500 ft)	0.9 km (0.6 mi)	2.1 km (1.3 mi)	1000 m (3000 ft)	5.9 km (3.7 mi)	8.3 km (5.2 mi)	
—	153	GA (when used as a weapon)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	100 m (300 ft)	0.5 km (0.4 mi)	0.6 km (0.4 mi)	

—	153	GB (when used as a weapon)	60 m (200 ft)	0.4 km (0.3 mi)	1.1 km (0.7 mi)	400 m (1250 ft)	2.1 km (1.3 mi)	4.9 km (3.0 mi)
—	153	GD (when used as a weapon)	60 m (200 ft)	0.4 km (0.3 mi)	0.7 km (0.5 mi)	300 m (1000 ft)	1.8 km (1.1 mi)	2.7 km (1.7 mi)
—	153	GF (when used as a weapon)	30 m (100 ft)	0.2 km (0.2 mi)	0.3 km (0.2 mi)	150 m (500 ft)	0.8 km (0.5 mi)	1.0 km (0.6 mi)
—	153	H (when used as a weapon)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.3 km (0.2 mi)	0.4 km (0.3 mi)
—	153	HD (when used as a weapon)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.3 km (0.2 mi)	0.4 km (0.3 mi)
—	153	HL (when used as a weapon)	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	100 m (300 ft)	0.5 km (0.3 mi)	1.0 km (0.6 mi)
—	153	HN-1 (when used as a weapon)	60 m (200 ft)	0.3 km (0.2 mi)	0.5 km (0.3 mi)	200 m (600 ft)	1.1 km (0.7 mi)	1.8 km (1.1 mi)
—	153	HN-2 (when used as a weapon)	60 m (200 ft)	0.3 km (0.2 mi)	0.6 km (0.4 mi)	300 m (1000 ft)	1.3 km (0.8 mi)	2.1 km (1.3 mi)
—	153	HN-3 (when used as a weapon)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.3 km (0.2 mi)	0.3 km (0.2 mi)
—	153	L (Lewisite) (when used as a weapon)	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	100 m (300 ft)	0.5 km (0.3 mi)	1.0 km (0.6 mi)
—	153	Lewisite (when used as a weapon)	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	100 m (300 ft)	0.5 km (0.3 mi)	1.0 km (0.6 mi)
—	152	MD (when used as a weapon)	300 m (1000 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)	1000 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
—	153	Mustard (when used as a weapon)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.3 km (0.2 mi)	0.4 km (0.3 mi)
—	153	Mustard Lewisite (when used as a weapon)	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	100 m (300 ft)	0.5 km (0.3 mi)	1.0 km (0.6 mi)
—	152	PD (when used as a weapon)	60 m (200 ft)	0.4 km (0.3 mi)	0.4 km (0.3 mi)	300 m (1000 ft)	1.6 km (1.0 mi)	1.6 km (1.0 mi)
—	119	SA (when used as a weapon)	300 m (1000 ft)	1.9 km (1.2 mi)	5.7 km (3.6 mi)	1000 m (3000 ft)	8.9 km (5.6 mi)	11.0+ km (7.0+ mi)
—	153	Sarin (when used as a weapon)	60 m (200 ft)	0.4 km (0.3 mi)	1.1 km (0.7 mi)	400 m (1250 ft)	2.1 km (1.3 mi)	4.9 km (3.0 mi)

"+" means distance can be larger in certain atmospheric conditions

TABLE 1

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)			
ID No.	Guide	NAME OF MATERIAL	First ISOLATE in all Directions		Then PROTECT persons Downwind during		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during	
			Meters (Feet)	Kilometers (Miles)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
—	153	Soman (when used as a weapon)	60 m (200 ft)	0.4 km (0.3 mi)	0.7 km (0.5 mi)		300 m (1000 ft)	1.8 km (1.1 mi)	2.7 km (1.7 mi)
—	153	Tabun (when used as a weapon)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)		100 m (300 ft)	0.5 km (0.4 mi)	0.6 km (0.4 mi)
—	153	Thickened GD (when used as a weapon)	60 m (200 ft)	0.4 km (0.3 mi)	0.7 km (0.5 mi)		300 m (1000 ft)	1.8 km (1.1 mi)	2.7 km (1.7 mi)
—	153	VX (when used as a weapon)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)		60 m (200 ft)	0.4 km (0.2 mi)	0.3 km (0.2 mi)
1005	125	Ammonia, anhydrous	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)		Refer to table 3		
1005	125	Anhydrous ammonia	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)				
1008	125	Boron trifluoride	30 m (100 ft)	0.2 km (0.1 mi)	0.7 km (0.5 mi)		400 m (1250 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)
1008	125	Boron trifluoride, compressed	30 m (100 ft)	0.2 km (0.1 mi)	0.7 km (0.5 mi)				
1016	119	Carbon monoxide	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)		200 m (600 ft)	1.2 km (0.7 mi)	4.3 km (2.7 mi)
1016	119	Carbon monoxide, compressed	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)				
1017	124	Chlorine	60 m (200 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)		Refer to table 3		
1026	119	Cyanogen	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.3 mi)		60 m (200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)
1040	119P	Ethylene oxide	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.2 mi)		Refer to table 3		
1040	119P	Ethylene oxide with Nitrogen	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.2 mi)				
1045	124	Fluorine	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)		100 m (300 ft)	0.5 km (0.3 mi)	2.3 km (1.4 mi)
1045	124	Fluorine, compressed	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)				
1048	125	Hydrogen bromide, anhydrous	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.2 mi)		150 m (500 ft)	1.0 km (0.6 mi)	3.4 km (2.1 mi)
1050	125	Hydrogen chloride, anhydrous	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)		Refer to table 3		

1051	117P	Hydrogen cyanide, anhydrous, stabilized	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	200 m (600 ft)	0.7 km (0.5 mi)	1.7 km (1.1 mi)
1051	117P	Hydrogen cyanide, stabilized	30 m (100 ft)	0.1 km (0.1 mi)	0.5 km (0.3 mi)	Refer to table 3		
1052	125	Hydrogen fluoride, anhydrous	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)	6.3 km (3.9 mi)
1053	117	Hydrogen sulfide	30 m (100 ft)	0.1 km (0.1 mi)	0.5 km (0.3 mi)	200 m (600 ft)	0.7 km (0.4 mi)	2.1 km (1.3 mi)
1053	117	Hydrogen sulphide	30 m (100 ft)	0.1 km (0.1 mi)	0.5 km (0.3 mi)	150 m (500 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)
1061	118	Methylamine, anhydrous	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	200 m (600 ft)	1.3 km (0.8 mi)	4.1 km (2.6 mi)
1062	123	Methyl bromide	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	200 m (600 ft)	1.4 km (0.9 mi)	3.3 km (2.1 mi)
1064	117	Methyl mercaptan	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	400 m (1250 ft)	4.3 km (2.7 mi)	10.8 km (6.7 mi)
1067	124	Dinitrogen tetroxide	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.3 mi)	800 m (2500 ft)	2.9 km (1.8 mi)	9.2 km (5.7 mi)
1067	124	Nitrogen dioxide	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.3 mi)	500 m (1500 ft)	Refer to table 3	
1069	125	Nitrosyl chloride	30 m (100 ft)	0.2 km (0.2 mi)	1.0 km (0.6 mi)	60 m (200 ft)	0.4 km (0.2 mi)	0.8 km (0.5 mi)
1076	125	Phosgene	100 m (300 ft)	0.6 km (0.4 mi)	2.4 km (1.5 mi)	500 m (1500 ft)	6.1 km (3.8 mi)	10.8 km (6.7 mi)
1079	125	Sulfur dioxide	100 m (300 ft)	0.6 km (0.4 mi)	2.5 km (1.6 mi)	100 m (300 ft)	1.2 km (0.8 mi)	2.3 km (1.4 mi)
1079	125	Sulphur dioxide	100 m (300 ft)	0.6 km (0.4 mi)	2.5 km (1.6 mi)	30 m (100 ft)	1.2 km (0.8 mi)	2.3 km (1.4 mi)
1082	119P	Refrigerant gas R-1113	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.7 km (0.5 mi)	1.2 km (0.8 mi)
1082	119P	Trifluorochloroethylene, stabilized	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)	0.1 km (0.1 mi)
1092	131P	Acrolein, stabilized	100 m (300 ft)	1.2 km (0.8 mi)	3.3 km (2.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	0.7 km (0.5 mi)
1093	131P	Acrylonitrile, stabilized	30 m (100 ft)	0.2 km (0.2 mi)	0.6 km (0.4 mi)	500 m (1500 ft)	6.1 km (3.8 mi)	10.8 km (6.7 mi)
1098	131	Allyl alcohol	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	100 m (300 ft)	1.2 km (0.8 mi)	2.3 km (1.4 mi)
1135	131	Ethylene chlorohydrin	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.7 km (0.5 mi)	1.2 km (0.8 mi)
1143	131P	Crotonaldehyde	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)	0.1 km (0.1 mi)
1143	131P	Crotonaldehyde, stabilized	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	0.7 km (0.5 mi)

"+" means distance can be larger in certain atmospheric conditions

TABLE 1

TABLE 1 - INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.		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	
		Meters (Feet)	Kilometers (Miles)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters (Feet)	Kilometers (Miles)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
1162	155	Dimethyldichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.2 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.8 km (1.1 mi)	
1163	131	Dimethylhydrazine, unsymmetrical	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	100 m (300 ft)	1.0 km (0.6 mi)	1.8 km (1.1 mi)	
1182	155	Ethyl chloroformate	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.6 km (0.4 mi)	0.9 km (0.6 mi)	
1183	139	Ethyldichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.6 km (0.4 mi)	2.0 km (1.3 mi)	
1185	131P	Ethyleneimine, stabilized	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	200 m (600 ft)	0.9 km (0.6 mi)	1.8 km (1.1 mi)	
1196	155	Ethyltrichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.5 km (0.3 mi)	200 m (600 ft)	2.1 km (1.3 mi)	5.8 km (3.6 mi)	
1238	155	Methyl chloroformate	30 m (100 ft)	0.2 km (0.2 mi)	0.5 km (0.4 mi)	150 m (500 ft)	1.1 km (0.7 mi)	2.1 km (1.3 mi)	
1239	131	Methyl chloromethyl ether	60 m (200 ft)	0.5 km (0.3 mi)	1.5 km (0.9 mi)	300 m (1000 ft)	3.1 km (2.0 mi)	5.8 km (3.6 mi)	
1242	139	Methyldichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.8 km (0.5 mi)	2.3 km (1.5 mi)	
1244	131	Methylhydrazine	30 m (100 ft)	0.3 km (0.2 mi)	0.6 km (0.4 mi)	100 m (300 ft)	1.4 km (0.9 mi)	2.1 km (1.3 mi)	
1250	155	Methyltrichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.8 km (0.5 mi)	2.5 km (1.6 mi)	
1251	131P	Methyl vinyl ketone, stabilized	100 m (300 ft)	0.3 km (0.2 mi)	0.7 km (0.4 mi)	800 m (2500 ft)	1.6 km (1.0 mi)	2.8 km (1.8 mi)	
1259	131	Nickel carbonyl	100 m (300 ft)	1.3 km (0.8 mi)	5.0 km (3.1 mi)	1000 m (3000 ft)	10.8 km (6.8 mi)	11.0+ km (7.0+ mi)	

1295	139	Trichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.6 km (0.4 mi)	2.1 km (1.3 mi)	
1298	155	Trimethylchlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.4 km (0.9 mi)	
1305	155P	Vinyltrichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.9 km (1.2 mi)	
1305	155P	Vinyltrichlorosilane, stabilized (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.9 km (1.2 mi)	
1340	139	Phosphorus pentasulfide, free from yellow and white Phosphorus (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)	
1340	139	Phosphorus pentasulphide, free from yellow and white Phosphorus (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)	
1360	139	Calcium phosphide (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.3 mi)	0.4 km (0.3 mi)	300 m (1000 ft)	1.0 km (0.6 mi)	3.5 km (2.2 mi)	
1380	135	Pentaborane	60 m (200 ft)	0.6 km (0.4 mi)	1.9 km (1.2 mi)	1.9 km (1.2 mi)	200 m (600 ft)	2.7 km (1.7 mi)	6.2 km (3.9 mi)	
1384	135	Sodium dithionite (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.3 mi)	0.4 km (0.3 mi)	60 m (200 ft)	0.6 km (0.4 mi)	2.5 km (1.6 mi)	
1384	135	Sodium hydrosulfite (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.3 mi)	0.4 km (0.3 mi)	60 m (200 ft)	0.6 km (0.4 mi)	2.5 km (1.6 mi)	
1384	135	Sodium hydrosulphite (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.3 mi)	0.4 km (0.3 mi)	60 m (200 ft)	0.6 km (0.4 mi)	2.5 km (1.6 mi)	
1390	139	Alkali metal amides (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.6 km (0.4 mi)	2.2 km (1.4 mi)	
1397	139	Aluminum phosphide (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.7 km (0.5 mi)	0.7 km (0.5 mi)	500 m (1500 ft)	2.0 km (1.2 mi)	6.5 km (4.0 mi)	

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TABLE 1

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)			
ID No.	Guide	NAME OF MATERIAL	First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		
				DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	
1419	139	Magnesium aluminum phosphide (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.6 km (0.4 mi)	500 m (1500 ft)	1.8 km (1.1 mi)	5.8 km (3.6 mi)	
1432	139	Sodium phosphide (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.2 mi)	300 m (1000 ft)	1.3 km (0.8 mi)	3.8 km (2.4 mi)	
1510	143	Tetranitromethane	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	30 m (100 ft)	0.4 km (0.3 mi)	0.7 km (0.4 mi)	
1541	155	Acetone cyanohydrin, stabilized (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.2 km (0.2 mi)	0.8 km (0.5 mi)	
1556	152	Methyldichloroarsine	100 m (300 ft)	1.4 km (0.9 mi)	2.1 km (1.3 mi)	300 m (1000 ft)	3.8 km (2.4 mi)	5.2 km (3.3 mi)	
1560	157	Arsenic chloride	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	100 m (300 ft)	1.0 km (0.6 mi)	1.5 km (1.0 mi)	
1560	157	Arsenic trichloride	30 m (100 ft)	0.4 km (0.3 mi)	1.2 km (0.7 mi)	150 m (500 ft)	1.6 km (1.0 mi)	3.2 km (2.0 mi)	
1569	131	Bromoacetone	60 m (200 ft)	0.5 km (0.3 mi)	1.2 km (0.8 mi)	200 m (600 ft)	2.2 km (1.4 mi)	3.6 km (2.3 mi)	
1580	154	Chloropicrin	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	Chloropicrin and Methyl bromide mixture	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.3 mi)	60 m (200 ft)	0.4 km (0.2 mi)	1.7 km (1.1 mi)	
1581	123	Methyl bromide and Chloropicrin mixture	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.3 mi)	60 m (200 ft)	0.4 km (0.2 mi)	1.7 km (1.1 mi)	
1582	119	Chloropicrin and Methyl chloride mixture	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.3 mi)	60 m (200 ft)	0.4 km (0.2 mi)	1.7 km (1.1 mi)	
1582	119	Methyl chloride and Chloropicrin mixture	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.3 mi)	60 m (200 ft)	0.4 km (0.2 mi)	1.7 km (1.1 mi)	
1583	154	Chloropicrin mixture, n.o.s.	60 m (200 ft)	0.5 km (0.3 mi)	1.2 km (0.8 mi)	200 m (600 ft)	2.2 km (1.4 mi)	3.6 km (2.3 mi)	

1589	125	Cyanogen chloride, stabilized	300 m (1000 ft)	1.8 km (1.2 mi)	6.4 km (4.0 mi)	1000 m (3000 ft)	9.7 km (6.0 mi)	11.0+ km (7.0+ mi)
1595	156	Dimethyl sulfate	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	0.6 km (0.4 mi)
1595	156	Dimethyl sulphate	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)	0.2 km (0.1 mi)
1605	154	Ethylene dibromide	30 m (100 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	Compressed gas and hexaethyl tetraphosphate mixture	100 m (300 ft)					
1612	123	Hexaethyl tetraphosphate and compressed gas mixture	100 m (300 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	100 m (300 ft)	0.5 km (0.3 mi)	1.1 km (0.7 mi)
1613	154	Hydrocyanic acid, aqueous solution, with not more than 20% Hydrogen cyanide	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	100 m (300 ft)	0.5 km (0.3 mi)	1.1 km (0.7 mi)
1613	154	Hydrogen cyanide, aqueous solution, with not more than 20% Hydrogen cyanide	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	100 m (300 ft)	0.5 km (0.3 mi)	1.1 km (0.7 mi)
1614	152	Hydrogen cyanide, stabilized (absorbed)	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	150 m (500 ft)	0.5 km (0.3 mi)	1.5 km (0.9 mi)
1647	151	Ethylene dibromide and Methyl bromide mixture, liquid	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)
1647	151	Methyl bromide and Ethylene dibromide mixture, liquid	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)
1660	124	Nitric oxide	30 m (100 ft)	0.1 km (0.1 mi)	0.6 km (0.4 mi)	100 m (300 ft)	0.6 km (0.4 mi)	2.2 km (1.4 mi)
1660	124	Nitric oxide, compressed	30 m (100 ft)	0.2 km (0.2 mi)	0.4 km (0.2 mi)	100 m (300 ft)	0.8 km (0.5 mi)	1.2 km (0.8 mi)
1670	157	Perchloromethyl mercaptan	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	0.7 km (0.4 mi)
1672	151	Phenylcarbamylamine chloride	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.2 km (0.2 mi)	1.0 km (0.6 mi)
1680	157	Potassium cyanide, solid (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	100 m (300 ft)	0.3 km (0.2 mi)	1.2 km (0.7 mi)
1689	157	Sodium cyanide, solid (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	100 m (300 ft)	0.3 km (0.2 mi)	1.2 km (0.7 mi)

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TABLE 1

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)			
ID No.	Guide	NAME OF MATERIAL	First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during			
				DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		
1695	131	Chloroacetone, stabilized	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.4 km (0.3 mi)	0.6 km (0.4 mi)		
1716	156	Acetyl bromide (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.9 km (0.6 mi)		
1717	155	Acetyl chloride (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	100 m (300 ft)	0.9 km (0.6 mi)	2.6 km (1.6 mi)		
1722	155	Allyl chloroacetate	100 m (300 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)	400 m (1250 ft)	1.4 km (0.9 mi)	2.4 km (1.5 mi)		
1722	155	Allyl chloroformate		0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.7 km (1.1 mi)		
1724	155	Allyltrichlorosilane, stabilized (when spilled in water)	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)	0.3 km (0.2 mi)		
1725	137	Aluminum bromide, anhydrous (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	2.0 km (1.2 mi)		
1726	137	Aluminum chloride, anhydrous (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.7 km (1.0 mi)		
1728	155	Amyltrichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	100 m (300 ft)	1.1 km (0.7 mi)	3.9 km (2.4 mi)		
1732	157	Antimony pentafluoride (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	100 m (300 ft)	0.6 km (0.4 mi)	1.4 km (0.9 mi)		
1741	125	Boron trichloride (when spilled on land)	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	100 m (300 ft)	1.2 km (0.8 mi)	3.6 km (2.2 mi)		
1741	125	Boron trichloride (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	100 m (300 ft)	1.2 km (0.8 mi)	3.6 km (2.2 mi)		

1744	154	Bromine	60 m	0.8 km	2.3 km	1.5 mi)	300 m	3.8 km	7.5 km	(4.7 mi)
1744	154	Bromine, solution	30 m	0.1 km	0.2 km	(0.2 mi)	30 m	0.3 km	0.5 km	(0.3 mi)
1744	154	Bromine, solution (Inhalation Hazard Zone A)	100 m	0.9 km	2.5 km	(1.6 mi)	400 m	5.4 km	10.7 km	(6.6 mi)
1745	144	Bromine pentafluoride (when spilled on land)	30 m	0.1 km	0.3 km	(0.2 mi)	150 m	1.2 km	4.0 km	(2.5 mi)
1745	144	Bromine pentafluoride (when spilled in water)	30 m	0.1 km	0.2 km	(0.1 mi)	30 m	0.3 km	0.4 km	(0.3 mi)
1746	144	Bromine trifluoride (when spilled on land)	30 m	0.1 km	0.3 km	(0.2 mi)	100 m	1.0 km	3.7 km	(2.3 mi)
1746	144	Bromine trifluoride (when spilled in water)	30 m	0.1 km	0.1 km	(0.1 mi)	60 m	0.5 km	1.6 km	(1.0 mi)
1747	155	Butyltrichlorosilane (when spilled in water)	60 m	0.3 km	1.1 km	(0.7 mi)	200 m	1.4 km	3.6 km	(2.3 mi)
1749	124	Chlorine trifluoride	30 m	0.3 km	0.6 km	(0.4 mi)	100 m	1.1 km	1.9 km	(1.2 mi)
1752	156	Chloroacetyl chloride (when spilled on land)	30 m	0.1 km	0.1 km	(0.1 mi)	30 m	0.2 km	0.6 km	(0.4 mi)
1752	156	Chloroacetyl chloride (when spilled in water)	30 m	0.1 km	0.1 km	(0.1 mi)	30 m	0.2 km	0.8 km	(0.5 mi)
1753	156	Chlorophenyltrichlorosilane (when spilled in water)	30 m	0.1 km	0.1 km	(0.1 mi)	30 m	0.2 km	0.3 km	(0.2 mi)
1754	137	Chlorosulfonic acid (with or without sulfur trioxide) (when spilled on land)								

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				DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	
1754	137	Chlorosulfonic acid (with or without sulfur trioxide) (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.7 km (0.4 mi)	2.3 km (1.4 mi)	
1754	137	Chlorosulphonic acid (with or without sulphur trioxide) (when spilled on land)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.2 km (0.2 mi)	0.3 km (0.2 mi)	
1754	137	Chlorosulphonic acid (with or without sulphur trioxide) (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.7 km (0.4 mi)	2.3 km (1.4 mi)	
1758	137	Chromium oxychloride (when spilled in water)	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)	0.5 km (0.3 mi)	
1762	156	Cyclohexenyltrichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	1.2 km (0.7 mi)	
1763	156	Cyclohexyltrichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	1.2 km (0.7 mi)	
1765	156	Dichloroacetyl chloride (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.2 km (0.1 mi)	0.7 km (0.5 mi)	
1766	156	Dichlorophenyltrichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.5 km (0.4 mi)	2.0 km (1.2 mi)	
1767	155	Diethyldichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.9 km (0.5 mi)	

1769	156	Diphenyltrichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)
1771	156	Dodecyltrichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.4 km (0.3 mi)	1.2 km (0.8 mi)
1777	137	Fluorosulfonic acid (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)
1777	137	Fluorosulfonic acid (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)
1781	156	Hexadecyltrichlorosilane (when spilled in water)	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)
1784	156	Hexyltrichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.4 km (0.2 mi)	1.3 km (0.8 mi)
1799	156	Nonyltrichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.4 km (0.3 mi)	1.4 km (0.9 mi)
1800	156	Octadecyltrichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.4 km (0.3 mi)	1.3 km (0.8 mi)
1801	156	Octyltrichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.4 km (0.3 mi)	1.4 km (0.9 mi)
1804	156	Phenyltrichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.4 km (0.2 mi)	1.3 km (0.8 mi)
1806	137	Phosphorus pentachloride (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)
1808	137	Phosphorus tribromide (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.4 km (0.3 mi)	1.5 km (0.9 mi)
1809	137	Phosphorus trichloride (when spilled on land)	30 m (100 ft)	0.2 km (0.2 mi)	0.6 km (0.4 mi)	100 m (300 ft)	1.0 km (0.7 mi)	2.1 km (1.3 mi)
1809	137	Phosphorus trichloride (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.7 km (0.4 mi)	2.4 km (1.5 mi)

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			Meters (Feet)	Kilometers (Miles)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	
1810	137	Phosphorus oxychloride (when spilled on land)	30 m (100 ft)	0.3 km (0.2 mi)	0.6 km (0.4 mi)		100 m (300 ft)	1.0 km (0.7 mi)	1.9 km (1.2 mi)	
1810	137	Phosphorus oxychloride (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)		60 m (200 ft)	0.6 km (0.4 mi)	2.1 km (1.3 mi)	
1815	132	Propionyl chloride (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)		30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	
1816	155	Propyltrichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)		60 m (200 ft)	0.5 km (0.3 mi)	1.9 km (1.2 mi)	
1818	157	Silicon tetrachloride (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)		60 m (200 ft)	0.8 km (0.5 mi)	2.7 km (1.7 mi)	
1828	137	Sulfur chlorides (when spilled on land)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)		60 m (200 ft)	0.3 km (0.2 mi)	0.4 km (0.3 mi)	
1828	137	Sulfur chlorides (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)		30 m (100 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	
1828	137	Sulphur chlorides (when spilled on land)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)		60 m (200 ft)	0.3 km (0.2 mi)	0.4 km (0.3 mi)	
1828	137	Sulphur chlorides (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)		30 m (100 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	
1829	137	Sulfur trioxide, stabilized	60 m (200 ft)	0.4 km (0.2 mi)	1.0 km (0.6 mi)		300 m (1000 ft)	2.9 km (1.8 mi)	6.3 km (4.0 mi)	
1831	137	Sulfuric acid, fuming	60 m (200 ft)	0.4 km (0.2 mi)	1.0 km (0.6 mi)		300 m (1000 ft)	2.9 km (1.8 mi)	6.3 km (4.0 mi)	
1831	137	Sulphuric acid, fuming								

1834	137	Sulfuryl chloride (when spilled on land)	30 m (100 ft)	0.2 km (0.1 mi)	0.4 km (0.3 mi)	60 m (200 ft)	0.8 km (0.5 mi)	1.5 km (0.9 mi)
1834	137	Sulfuryl chloride (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.4 km (0.3 mi)	1.6 km (1.0 mi)
1834	137	Sulphuryl chloride (when spilled on land)	30 m (100 ft)	0.2 km (0.1 mi)	0.4 km (0.3 mi)	60 m (200 ft)	0.8 km (0.5 mi)	1.5 km (0.9 mi)
1834	137	Sulphuryl chloride (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.4 km (0.3 mi)	1.6 km (1.0 mi)
1836	137	Thionyl chloride (when spilled on land)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.2 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.5 km (0.3 mi)
1836	137	Thionyl chloride (when spilled in water)	100 m (300 ft)	0.9 km (0.6 mi)	2.9 km (1.8 mi)	800 m (2500 ft)	9.7 km (6.0 mi)	11.0+ km (7.0+ mi)
1838	137	Titanium tetrachloride (when spilled on land)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.5 km (0.3 mi)
1838	137	Titanium tetrachloride (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.7 km (1.0 mi)
1859	125	Silicon tetrafluoride	30 m (100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	100 m (300 ft)	0.5 km (0.3 mi)	1.8 km (1.2 mi)
1859	125	Silicon tetrafluoride, compressed	30 m (100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	100 m (300 ft)	0.5 km (0.3 mi)	1.8 km (1.2 mi)
1892	151	Ethyldichloroarsine	150 m (500 ft)	1.5 km (0.9 mi)	2.1 km (1.3 mi)	400 m (1250 ft)	4.6 km (2.9 mi)	6.4 km (4.0 mi)
1898	156	Acetyl iodide (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.4 km (0.3 mi)	1.1 km (0.7 mi)
1911	119	Diborane	60 m (200 ft)	0.3 km (0.2 mi)	1.2 km (0.7 mi)	300 m (1000 ft)	1.5 km (1.0 mi)	4.6 km (2.9 mi)
1911	119	Diborane, compressed						
1911	119	Diborane mixtures						

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TABLE 1

TABLE 1 - INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.		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 Meters (Feet)	Then PROTECT persons Downwind during		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during	
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
1923	135	Calcium dithionite (when spilled in water)					
1923	135	Calcium hydrosulfite (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	60 m (200 ft)	0.7 km (0.4 mi)	2.6 km (1.6 mi)
1923	135	Calcium hydrosulphite (when spilled in water)					
1929	135	Potassium dithionite (when spilled in water)					
1929	135	Potassium hydrosulfite (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	60 m (200 ft)	0.6 km (0.4 mi)	2.3 km (1.5 mi)
1929	135	Potassium hydrosulphite (when spilled in water)					
1931	171	Zinc dithionite (when spilled in water)					
1931	171	Zinc hydrosulfite (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	60 m (200 ft)	0.6 km (0.4 mi)	2.4 km (1.5 mi)
1931	171	Zinc hydrosulphite (when spilled in water)					
1953	119	Compressed gas, poisonous, flammable, n.o.s.					
1953	119	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	150 m (500 ft)	1.0 km (0.6 mi)	1000 m (3000 ft)	5.7 km (3.6 mi)	10.1 km (6.3 mi)
1953	119	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.1 km (0.1 mi)	300 m (1000 ft)	1.3 km (0.8 mi)	3.4 km (2.1 mi)

1953	119	Compressed gas, poisonous, flammable, 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)
1953	119	Compressed gas, poisonous, flammable, 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)
1953	119	Compressed gas, toxic, flammable, n.o.s.						
1953	119	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)	150 m (500 ft)	1.0 km (0.6 mi)	3.8 km (2.4 mi)	1000 m (3000 ft)	5.7 km (3.6 mi)	10.1 km (6.3 mi)
1953	119	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.2 mi)	300 m (1000 ft)	1.3 km (0.8 mi)	3.4 km (2.1 mi)
1953	119	Compressed gas, toxic, flammable, 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)
1953	119	Compressed gas, toxic, flammable, 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, poisonous, n.o.s.						
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)

"+" means distance can be larger in certain atmospheric conditions

TABLE 1

TABLE 1 - INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.		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 Meters (Feet)	Then PROTECT persons Downwind during		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		NIGHT Kilometers (Miles)	NIGHT Kilometers (Miles)
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		
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)							
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 phosphorus compound mixed with compressed gas							
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.							
1967	123	Parathion and compressed gas mixture							

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		SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
ID No.	Guide	NAME OF MATERIAL	First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		
				DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	
2195	125	Tellurium hexafluoride	1000 m (3000 ft)	5.8 km (3.6 mi)	10.9 km (6.8 mi)	1000 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)	
2196	125	Tungsten hexafluoride	30 m (100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	150 m (500 ft)	0.8 km (0.5 mi)	2.7 km (1.7 mi)	
2197	125	Hydrogen iodide, anhydrous	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)	
2198	125	Phosphorus pentafluoride	30 m (100 ft)	0.2 km (0.2 mi)	1.0 km (0.7 mi)	150 m (500 ft)	1.0 km (0.6 mi)	3.5 km (2.2 mi)	
2198	125	Phosphorus pentatluoride, compressed	30 m (100 ft)	0.2 km (0.2 mi)	1.0 km (0.7 mi)	150 m (500 ft)	1.0 km (0.6 mi)	3.5 km (2.2 mi)	
2199	119	Phosphine	60 m (200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	300 m (1000 ft)	1.3 km (0.8 mi)	3.7 km (2.3 mi)	
2202	117	Hydrogen selenide, anhydrous	300 m (1000 ft)	1.7 km (1.1 mi)	6.0 km (3.7 mi)	1000 m (3000 ft)	10.7 km (6.7 mi)	11.0+ km (7.0+ mi)	
2204	119	Carbonyl sulfide	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	300 m (1000 ft)	1.6 km (1.0 mi)	3.8 km (2.4 mi)	
2204	119	Carbonyl sulphide	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	300 m (1000 ft)	1.6 km (1.0 mi)	3.8 km (2.4 mi)	
2232	153	Chloroacetaldehyde	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.1 km (0.7 mi)	
2232	153	2-Chloroethanal	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.1 km (0.7 mi)	
2285	156	Isocyanatobenzotrifluorides	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.4 km (0.3 mi)	0.6 km (0.4 mi)	
2308	157	Nitrosylsulfuric acid, liquid (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	300 m (1000 ft)	1.0 km (0.6 mi)	2.9 km (1.8 mi)	
2308	157	Nitrosylsulphuric acid, liquid (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	300 m (1000 ft)	1.0 km (0.6 mi)	2.9 km (1.8 mi)	
2334	131	Allylamine	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.4 mi)	150 m (500 ft)	1.4 km (0.9 mi)	2.5 km (1.6 mi)	
2337	131	Phenyl mercaptan	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.4 km (0.2 mi)	
2353	132	Butyl chloride (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.7 km (0.5 mi)	

2382	131	Dimethylhydrazine, symmetrical	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.7 km (0.5 mi)	1.3 km (0.8 mi)	
2395	132	Isobutryl chloride (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.2 km (0.1 mi)	0.4 km (0.3 mi)	
2407	155	Isopropyl chloroformate	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.2 mi)	60 m (200 ft)	0.5 km (0.3 mi)	0.9 km (0.6 mi)	
2417	125	Carbonyl fluoride	150 m (500 ft)	0.7 km (0.5 mi)	2.5 km (1.6 mi)	600 m (2000 ft)	3.6 km (2.3 mi)	7.8 km (4.9 mi)	
2417	125	Carbonyl fluoride, compressed							
2418	125	Sulfur tetrafluoride	100 m (300 ft)	0.5 km (0.3 mi)	2.3 km (1.5 mi)	400 m (1250 ft)	2.1 km (1.3 mi)	6.0 km (3.7 mi)	
2418	125	Sulphur tetrafluoride							
2420	125	Hexafluoroacetone	100 m (300 ft)	0.7 km (0.4 mi)	2.7 km (1.7 mi)	1000 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)	
2421	124	Nitrogen trioxide	60 m (200 ft)	0.3 km (0.2 mi)	1.2 km (0.7 mi)	200 m (600 ft)	1.2 km (0.8 mi)	4.2 km (2.6 mi)	
2434	156	Dibenzylchlorosilane (when spilled in water)	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)	
2435	156	Ethylphenyldichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.9 km (0.6 mi)	
2437	156	Methylphenyldichlorosilane (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.4 km (0.2 mi)	1.2 km (0.8 mi)	
2438	131	Trimethylacetyl chloride	60 m (200 ft)	0.5 km (0.3 mi)	1.0 km (0.6 mi)	200 m (600 ft)	2.1 km (1.3 mi)	3.3 km (2.1 mi)	
2442	156	Trichloroacetyl chloride	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.7 km (0.4 mi)	1.1 km (0.7 mi)	
2474	157	Thiophosgene	60 m (200 ft)	0.6 km (0.4 mi)	1.7 km (1.1 mi)	200 m (600 ft)	2.1 km (1.3 mi)	4.0 km (2.5 mi)	
2477	131	Methyl isothiocyanate	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.4 km (0.3 mi)	

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SMALL SPILLS (From a small package or small leak from a large package)			LARGE SPILLS (From a large package or from many small packages)					
ID No.	Guide	NAME OF MATERIAL	First ISOLATE in all Directions	Then PROTECT persons Downwind during		First ISOLATE in all Directions	Then PROTECT persons Downwind during	
			Meters (Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters (Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
2478	155	Isocyanate solution, flammable, poisonous, n.o.s.						
2478	155	Isocyanate solution, flammable, toxic, n.o.s.	60 m (200 ft)	0.8 km (0.5 mi)	1.8 km (1.1 mi)	400 m (1250 ft)	4.4 km (2.7 mi)	7.0 km (4.3 mi)
2478	155	Isocyanates, flammable, poisonous, n.o.s.						
2478	155	Isocyanates, flammable, toxic, n.o.s.						
2480	155P	Methyl isocyanate	150 m (500 ft)	1.7 km (1.1 mi)	5.0 km (3.1 mi)	1000 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
2481	155	Ethyl isocyanate	150 m (500 ft)	2.0 km (1.2 mi)	5.1 km (3.2 mi)	1000 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
2482	155P	n-Propyl isocyanate	100 m (300 ft)	1.3 km (0.8 mi)	2.7 km (1.7 mi)	600 m (2000 ft)	7.4 km (4.6 mi)	10.8 km (6.7 mi)
2483	155P	Isopropyl isocyanate	150 m (500 ft)	1.5 km (0.9 mi)	3.2 km (2.0 mi)	1000 m (3000 ft)	11.0 km (6.9 mi)	11.0+ km (7.0+ mi)
2484	155	tert-Butyl isocyanate	60 m (200 ft)	0.8 km (0.5 mi)	1.8 km (1.1 mi)	400 m (1250 ft)	4.4 km (2.7 mi)	7.0 km (4.3 mi)
2485	155P	n-Butyl isocyanate	60 m (200 ft)	0.6 km (0.4 mi)	1.1 km (0.7 mi)	200 m (600 ft)	2.6 km (1.7 mi)	4.0 km (2.5 mi)
2486	155P	Isobutyl isocyanate	60 m (200 ft)	0.6 km (0.4 mi)	1.2 km (0.8 mi)	300 m (1000 ft)	3.1 km (1.9 mi)	4.7 km (3.0 mi)
2487	155	Phenyl isocyanate	100 m (300 ft)	0.9 km (0.6 mi)	1.4 km (0.9 mi)	300 m (1000 ft)	3.7 km (2.3 mi)	5.4 km (3.4 mi)
2488	155	Cyclohexyl isocyanate	30 m (100 ft)	0.3 km (0.2 mi)	0.4 km (0.3 mi)	100 m (300 ft)	1.0 km (0.6 mi)	1.4 km (0.9 mi)
2495	144	Iodine pentafluoride (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	100 m (300 ft)	1.1 km (0.7 mi)	4.1 km (2.6 mi)
2521	131P	Diketene, stabilized	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.0 km (0.6 mi)
2534	119	Methylchlorosilane	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	150 m (500 ft)	0.7 km (0.5 mi)	1.9 km (1.2 mi)

2548	124	Chlorine pentafluoride	100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	800 m (2500 ft)	5.0 km (3.1 mi)	11.0+ km (7.0+ mi)
2605	155	Methoxymethyl isocyanate	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.2 mi)	60 m (200 ft)	0.6 km (0.4 mi)	0.9 km (0.6 mi)
2606	155	Methyl orthosilicate	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.7 km (0.4 mi)	1.1 km (0.7 mi)
2644	151	Methyl iodide	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	100 m (300 ft)	0.3 km (0.2 mi)	0.7 km (0.4 mi)
2646	151	Hexachlorocyclopentadiene	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.3 km (0.2 mi)
2668	131	Chloroacetonitrile	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.4 km (0.2 mi)
2676	119	Stibine	60 m (200 ft)	0.3 km (0.2 mi)	1.6 km (1.0 mi)	200 m (600 ft)	1.3 km (0.8 mi)	4.1 km (2.6 mi)
2691	137	Phosphorus pentabromide (when spilled in water)	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)	0.5 km (0.3 mi)
2692	157	Boron tribromide (when spilled on land)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.2 km (0.1 mi)	0.4 km (0.3 mi)
2692	157	Boron tribromide (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.9 km (1.2 mi)
2740	155	n-Propyl chloroformate	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.0 km (0.7 mi)
2742	155	sec-Butyl chloroformate	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.4 km (0.2 mi)	0.5 km (0.3 mi)
2742	155	Chloroformates, poisonous, corrosive, flammable, n.o.s.	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.2 mi)	60 m (200 ft)	0.5 km (0.3 mi)	0.7 km (0.5 mi)
2742	155	Chloroformates, toxic, corrosive, flammable, n.o.s.	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.5 km (0.3 mi)
2743	155	n-Butyl chloroformate	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.4 km (0.3 mi)
2806	139	Lithium nitride (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.2 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.9 km (1.2 mi)
2826	155	Ethyl chloroethioformate	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.2 mi)	60 m (200 ft)	0.5 km (0.3 mi)	0.7 km (0.5 mi)
2845	135	Ethyl phosphonous dichloride, anhydrous	30 m (100 ft)	0.3 km (0.2 mi)	0.7 km (0.5 mi)	100 m (300 ft)	1.3 km (0.8 mi)	2.3 km (1.5 mi)

"+" means distance can be larger in certain atmospheric conditions

TABLE 1

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)					
ID No.	Guide	NAME OF MATERIAL	First ISOLATE in all Directions	Then PROTECT persons Downwind during		First ISOLATE in all Directions	Then PROTECT persons Downwind during	
			Meters (Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters (Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
2845	135	Methyl phosphonous dichloride	30 m (100 ft)	0.4 km (0.3 mi)	1.1 km (0.7 mi)	200 m (600 ft)	2.4 km (1.5 mi)	4.1 km (2.6 mi)
2901	124	Bromine chloride	100 m (300 ft)	0.5 km (0.3 mi)	1.8 km (1.1 mi)	1000 m (3000 ft)	5.4 km (3.4 mi)	11.0+ km (7.0+ mi)
2927	154	Ethyl phosphonothioic dichloride, anhydrous	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)
2927	154	Ethyl phosphorodichloridate	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.3 km (0.2 mi)
2965	139	Boron trifluoride dimethyl etherate (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	100 m (300 ft)	1.2 km (0.8 mi)	3.6 km (2.2 mi)
2977	166	Radioactive material, Uranium hexafluoride, fissile (when spilled in water)						
2977	166	Uranium hexafluoride, radioactive material, fissile (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.4 km (0.3 mi)	2.1 km (1.3 mi)
2978	166	Radioactive material, Uranium hexafluoride, non fissile or fissile-excepted (when spilled in water)						
2978	166	Uranium hexafluoride, radioactive material, non fissile or fissile-excepted (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.4 km (0.3 mi)	2.1 km (1.3 mi)

2985	155	Chlorosilanes, flammable, corrosive, n.o.s. (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)
2986	155	Chlorosilanes, corrosive, flammable, n.o.s. (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)
2987	156	Chlorosilanes, corrosive, n.o.s. (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)
2988	139	Chlorosilanes, water-reactive, flammable, corrosive, n.o.s. (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)
3023	131	2-Methyl-2-heptanethiol	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.4 mi)	0.8 km (0.5 mi)
3048	157	Aluminum phosphide pesticide (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.7 km (0.5 mi)	500 m (1500 ft)	2.0 km (1.3 mi)	6.5 km (4.1 mi)
3057	125	Trifluoroacetyl chloride	30 m (100 ft)	0.2 km (0.1 mi)	0.9 km (0.6 mi)	800 m (2500 ft)	5.2 km (3.3 mi)	11.0+ km (7.0+ mi)
3079	131P	Methacrylonitrile, stabilized	30 m (100 ft)	0.3 km (0.2 mi)	0.7 km (0.5 mi)	150 m (500 ft)	1.6 km (1.0 mi)	2.7 km (1.7 mi)
3083	124	Perchloryl fluoride	30 m (100 ft)	0.2 km (0.2 mi)	1.1 km (0.7 mi)	1000 m (3000 ft)	5.5 km (3.4 mi)	11.0+ km (7.0+ mi)
3160	119	Liquefied gas, poisonous, flammable, n.o.s.						
3160	119	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	150 m (500 ft)	1.0 km (0.6 mi)	3.8 km (2.4 mi)	1000 m (3000 ft)	5.7 km (3.6 mi)	10.1 km (6.3 mi)
3160	119	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.2 mi)	300 m (1000 ft)	1.3 km (0.8 mi)	3.4 km (2.1 mi)
3160	119	Liquefied gas, poisonous, flammable, 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)

"+" means distance can be larger in certain atmospheric conditions

TABLE 1

TABLE 1 - INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.		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 Meters (Feet)	Then PROTECT persons Downwind during		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		
3160	119	Liquefied gas, poisonous, flammable, 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)		
3160	119	Liquefied gas, toxic, flammable, n.o.s.							
3160	119	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)	150 m (500 ft)	1.0 km (0.6 mi) 3.8 km (2.4 mi)	1000 m (3000 ft)	5.7 km (3.6 mi)	10.1 km (6.3 mi)		
3160	119	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.1 km (0.1 mi) 0.4 km (0.2 mi)	300 m (1000 ft)	1.3 km (0.8 mi)	3.4 km (2.1 mi)		
3160	119	Liquefied gas, toxic, flammable, 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)		
3160	119	Liquefied gas, toxic, flammable, 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, poisonous, n.o.s.							
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.							
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)	
3246	156	Methanesulfonyl chloride							
3246	156	Methanesulphonyl chloride	30 m (100 ft)	0.2 km (0.2 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.7 km (0.4 mi)	0.9 km (0.6 mi)	
3275	131	Nitriles, poisonous, flammable, n.o.s.							
3275	131	Nitriles, toxic, flammable, n.o.s.	30 m (100 ft)	0.3 km (0.2 mi)	0.7 km (0.5 mi)	150 m (500 ft)	1.6 km (1.0 mi)	2.7 km (1.7 mi)	
3276	151	Nitriles, liquid, poisonous, n.o.s.							
3276	151	Nitriles, liquid, toxic, n.o.s.							
3276	151	Nitriles, poisonous, liquid, n.o.s.							
3276	151	Nitriles, toxic, liquid, n.o.s.	30 m (100 ft)	0.3 km (0.2 mi)	0.7 km (0.5 mi)	150 m (500 ft)	1.6 km (1.0 mi)	2.7 km (1.7 mi)	
3278	151	Organophosphorus compound, liquid, poisonous, n.o.s.							
3278	151	Organophosphorus compound, liquid, toxic, n.o.s.							
3278	151	Organophosphorus compound, poisonous, liquid, n.o.s.	30 m (100 ft)	0.4 km (0.3 mi)	1.1 km (0.7 mi)	200 m (600 ft)	2.4 km (1.5 mi)	4.1 km (2.6 mi)	
3278	151	Organophosphorus compound, toxic, liquid, n.o.s.							

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TABLE 1

TABLE 1 - INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.		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 Meters (Feet)		Then PROTECT persons Downwind during		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		NIGHT Kilometers (Miles)
				DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	
3279	131	Organophosphorus compound, poisonous, flammable, n.o.s.		30 m (100 ft)	0.4 km (0.3 mi)	1.1 km (0.7 mi)	200 m (600 ft)	2.4 km (1.5 mi)	4.1 km (2.6 mi)
3279	131	Organophosphorus compound, toxic, flammable, n.o.s.		30 m (100 ft)	0.2 km (0.1 mi)	0.7 km (0.4 mi)	150 m (500 ft)	1.6 km (1.0 mi)	3.6 km (2.2 mi)
3280	151	Organoarsenic compound, liquid, n.o.s.		100 m (300 ft)	1.3 km (0.8 mi)	5.0 km (3.1 mi)	1000 m (3000 ft)	10.8 km (6.8 mi)	11.0+ km (7.0+ mi)
3281	151	Metal carbonyls, liquid, n.o.s.		30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	200 m (600 ft)	0.5 km (0.3 mi)	1.9 km (1.2 mi)
3294	131	Hydrogen cyanide, solution in alcohol, with not more than 45% Hydrogen cyanide		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)	2.2 km (1.4 mi)
3300	119P	Carbon dioxide and Ethylene oxide mixture, with more than 87% Ethylene oxide		30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.2 mi)	150 m (500 ft)	0.8 km (0.5 mi)	2.2 km (1.4 mi)
3300	119P	Ethylene oxide and Carbon dioxide mixture, with more than 87% Ethylene oxide		30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.2 mi)	150 m (500 ft)	0.8 km (0.5 mi)	2.2 km (1.4 mi)
3303	124	Compressed gas, poisonous, oxidizing, n.o.s.		100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	800 m (2500 ft)	5.0 km (3.1 mi)	11.0+ km (7.0+ mi)
3303	124	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)		100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	800 m (2500 ft)	5.0 km (3.1 mi)	11.0+ km (7.0+ mi)
3303	124	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)		60 m (200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	400 m (1250 ft)	2.5 km (1.5 mi)	6.7 km (4.2 mi)

3303	124	Compressed gas, poisonous, oxidizing, 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)	
3303	124	Compressed gas, poisonous, oxidizing, 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)	
3303	124	Compressed gas, toxic, oxidizing, n.o.s.							
3303	124	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	800 m (2500 ft)	5.0 km (3.1 mi)	11.0+ km (7.0+ mi)	
3303	124	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	400 m (1250 ft)	2.5 km (1.5 mi)	6.7 km (4.2 mi)	
3303	124	Compressed gas, toxic, oxidizing, 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)	
3303	124	Compressed gas, toxic, oxidizing, 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)	
3304	125	Compressed gas, poisonous, corrosive, n.o.s.							
3304	125	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	500 m (1500 ft)	2.9 km (1.8 mi)	9.2 km (5.7 mi)	
3304	125	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.2 mi)	1.0 km (0.7 mi)	400 m (1250 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)	
3304	125	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.1 km (0.1 mi)	0.5 km (0.3 mi)	300 m (1000 ft)	1.6 km (1.0 mi)	3.2 km (2.0 mi)	

"+" means distance can be larger in certain atmospheric conditions

TABLE 1

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)			
ID No.	Guide	NAME OF MATERIAL	First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		NIGHT Kilometers (Miles)
				DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	
3304	125	Compressed gas, poisonous, corrosive, 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)	
3304	125	Compressed gas, toxic, corrosive, n.o.s.							
3304	125	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	500 m (1500 ft)	2.9 km (1.8 mi)	9.2 km (5.7 mi)	
3304	125	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.2 mi)	1.0 km (0.7 mi)	400 m (1250 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)	
3304	125	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.1 km (0.1 mi)	0.5 km (0.3 mi)	300 m (1000 ft)	1.6 km (1.0 mi)	3.2 km (2.0 mi)	
3304	125	Compressed gas, toxic, corrosive, 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)	
3305	119	Compressed gas, poisonous, flammable, corrosive, n.o.s.							
3305	119	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	500 m (1500 ft)	2.9 km (1.8 mi)	9.2 km (5.7 mi)	

3305	119	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.2 mi)	1.0 km (0.7 mi)	400 m (1250 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)
3305	119	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.1 km (0.1 mi)	0.5 km (0.3 mi)	300 m (1000 ft)	1.6 km (1.0 mi)	3.2 km (2.0 mi)
3305	119	Compressed gas, poisonous, flammable, corrosive, 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)
3305	119	Compressed gas, toxic, flammable, corrosive, n.o.s.						
3305	119	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	500 m (1500 ft)	2.9 km (1.8 mi)	9.2 km (5.7 mi)
3305	119	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.2 mi)	1.0 km (0.7 mi)	400 m (1250 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)
3305	119	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.1 km (0.1 mi)	0.5 km (0.3 mi)	300 m (1000 ft)	1.6 km (1.0 mi)	3.2 km (2.0 mi)
3305	119	Compressed gas, toxic, flammable, corrosive, 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)
3306	124	Compressed gas, poisonous, oxidizing, corrosive, n.o.s.						
3306	124	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	500 m (1500 ft)	2.9 km (1.8 mi)	9.2 km (5.7 mi)
3306	124	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.2 mi)	1.0 km (0.7 mi)	400 m (1250 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)

"+" means distance can be larger in certain atmospheric conditions

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TABLE 1 - INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.		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 Meters (Feet)	Then PROTECT persons Downwind during		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during	
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
3306	124	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	0.1 km (0.1 mi)	0.5 km (0.3 mi)	300 m (1000 ft)	1.6 km (1.0 mi)	3.2 km (2.0 mi)
3306	124	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	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)
3306	124	Compressed gas, toxic, oxidizing, corrosive, n.o.s.					
3306	124	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	500 m (1500 ft)	2.9 km (1.8 mi)	9.2 km (5.7 mi)
3306	124	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	0.2 km (0.2 mi)	1.0 km (0.7 mi)	400 m (1250 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)
3306	124	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	0.1 km (0.1 mi)	0.5 km (0.3 mi)	300 m (1000 ft)	1.6 km (1.0 mi)	3.2 km (2.0 mi)
3306	124	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	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)

3307	124	Liquefied gas, poisonous, oxidizing, n.o.s.	100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	800 m (2500 ft)	5.0 km (3.1 mi)	11.0+ km (7.0+ mi)
3307	124	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	800 m (2500 ft)	5.0 km (3.1 mi)	11.0+ km (7.0+ mi)
3307	124	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	400 m (1250 ft)	2.5 km (1.5 mi)	6.7 km (4.2 mi)
3307	124	Liquefied gas, poisonous, oxidizing, 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)
3307	124	Liquefied gas, poisonous, oxidizing, 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)
3307	124	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	800 m (2500 ft)	5.0 km (3.1 mi)	11.0+ km (7.0+ mi)
3307	124	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	400 m (1250 ft)	2.5 km (1.5 mi)	6.7 km (4.2 mi)
3307	124	Liquefied gas, toxic, oxidizing, 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)
3307	124	Liquefied gas, toxic, oxidizing, 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)

"+" means distance can be larger in certain atmospheric conditions

TABLE 1

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)			
ID No.	Guide	NAME OF MATERIAL	First ISOLATE in all Directions		Then PROTECT persons Downwind during		First ISOLATE in all Directions	Then PROTECT persons Downwind during		
			Meters (Feet)	Kilometers (Miles)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	
							Meters (Feet)			Kilometers (Miles)
3308	125	Liquefied gas, poisonous, corrosive, n.o.s.	100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	500 m (1500 ft)	2.9 km (1.8 mi)	9.2 km (5.7 mi)		
3308	125	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)	30 m (100 ft)	0.2 km (0.2 mi)	1.0 km (0.7 mi)	400 m (1250 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)		
3308	125	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.1 km (0.1 mi)	0.5 km (0.3 mi)	300 m (1000 ft)	1.6 km (1.0 mi)	3.2 km (2.0 mi)		
3308	125	Liquefied gas, poisonous, corrosive, 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)		
3308	125	Liquefied gas, toxic, corrosive, n.o.s.	100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	500 m (1500 ft)	2.9 km (1.8 mi)	9.2 km (5.7 mi)		
3308	125	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.2 mi)	1.0 km (0.7 mi)	400 m (1250 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)		

3308	125	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.1 km (0.1 mi)	0.5 km (0.3 mi)	300 m (1000 ft)	1.6 km (1.0 mi)	3.2 km (2.0 mi)
3308	125	Liquefied gas, toxic, corrosive, 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)
3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s.						
3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	500 m (1500 ft)	2.9 km (1.8 mi)	9.2 km (5.7 mi)
3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.2 mi)	1.0 km (0.7 mi)	400 m (1250 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)
3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.1 km (0.1 mi)	0.5 km (0.3 mi)	300 m (1000 ft)	1.6 km (1.0 mi)	3.2 km (2.0 mi)
3309	119	Liquefied gas, poisonous, flammable, corrosive, 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)
3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s.						
3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)	500 m (1500 ft)	2.9 km (1.8 mi)	9.2 km (5.7 mi)
3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.2 mi)	1.0 km (0.7 mi)	400 m (1250 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)
3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.1 km (0.1 mi)	0.5 km (0.3 mi)	300 m (1000 ft)	1.6 km (1.0 mi)	3.2 km (2.0 mi)

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TABLE 1

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)					
ID No.	Guide	NAME OF MATERIAL	First		Then PROTECT		First ISOLATE in all Directions	Then PROTECT			
			ISOLATE in all Directions	Meters (Feet)	persons Downwind during	DAY		Kilometers (Miles)	persons Downwind during	DAY	Kilometers (Miles)
3309	119	Liquefied gas, toxic, flammable, corrosive, 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)		
3310	124	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s.									
3310	124	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)		500 m (1500 ft)	2.9 km (1.8 mi)	9.2 km (5.7 mi)		
3310	124	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.2 mi)	1.0 km (0.7 mi)		400 m (1250 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)		
3310	124	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.1 km (0.1 mi)	0.5 km (0.3 mi)		300 m (1000 ft)	1.6 km (1.0 mi)	3.2 km (2.0 mi)		
3310	124	Liquefied gas, poisonous, oxidizing, corrosive, 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)		
3310	124	Liquefied gas, toxic, oxidizing, corrosive, n.o.s.									
3310	124	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)	0.5 km (0.3 mi)	2.5 km (1.6 mi)		500 m (1500 ft)	2.9 km (1.8 mi)	9.2 km (5.7 mi)		

3310	124	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.2 mi)	1.0 km (0.7 mi)	400 m (1250 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)
3310	124	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.1 km (0.1 mi)	0.5 km (0.3 mi)	300 m (1000 ft)	1.6 km (1.0 mi)	3.2 km (2.0 mi)
3310	124	Liquefied gas, toxic, oxidizing, corrosive, 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)
3318	125	Ammonia solution, with more than 50% Ammonia	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)	2.1 km (1.3 mi)
3355	119	Insecticide gas, poisonous, flammable, n.o.s.						
3355	119	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	150 m (500 ft)	1.0 km (0.6 mi)	3.8 km (2.4 mi)	1000 m (3000 ft)	5.7 km (3.6 mi)	10.1 km (6.3 mi)
3355	119	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.2 mi)	300 m (1000 ft)	1.3 km (0.8 mi)	3.4 km (2.1 mi)
3355	119	Insecticide gas, poisonous, flammable, 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)
3355	119	Insecticide gas, poisonous, flammable, 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)
3355	119	Insecticide gas, toxic, flammable, n.o.s.						
3355	119	Insecticide gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)	150 m (500 ft)	1.0 km (0.6 mi)	3.8 km (2.4 mi)	1000 m (3000 ft)	5.7 km (3.6 mi)	10.1 km (6.3 mi)

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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)			
ID No.	Guide	NAME OF MATERIAL	First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		
				DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	
3355	119	Insecticide gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.1 km (0.1 mi)	0.4 km (0.2 mi)	300 m (1000 ft)	1.3 km (0.8 mi)	3.4 km (2.1 mi)	
3355	119	Insecticide gas, toxic, flammable, 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)	
3355	119	Insecticide gas, toxic, flammable, 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)	
3361	156	Chlorosilanes, poisonous, corrosive, n.o.s. (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)				
3361	156	Chlorosilanes, toxic, corrosive, n.o.s. (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	
3362	155	Chlorosilanes, poisonous, corrosive, flammable, n.o.s. (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)				
3362	155	Chlorosilanes, toxic, corrosive, flammable, n.o.s. (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	
3381	151	Poisonous by inhalation liquid, n.o.s. (Inhalation Hazard Zone A)	60 m (200 ft)	0.6 km (0.4 mi)	1.2 km (0.8 mi)	200 m (600 ft)	2.2 km (1.4 mi)	4.2 km (2.6 mi)	
3381	151	Toxic by inhalation liquid, n.o.s. (Inhalation Hazard Zone A)							

3382	151	Poisonous by inhalation liquid, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.2 mi)	60 m (200 ft)	0.5 km (0.3 mi)	0.7 km (0.5 mi)	
3382	151	Toxic by inhalation liquid, n.o.s. (Inhalation Hazard Zone B)							
3383	131	Poisonous by inhalation liquid, flammable, n.o.s. (Inhalation Hazard Zone A)	60 m (200 ft)	0.5 km (0.3 mi)	1.5 km (0.9 mi)	300 m (1000 ft)	3.1 km (2.0 mi)	5.8 km (3.6 mi)	
3383	131	Toxic by inhalation liquid, flammable, n.o.s. (Inhalation Hazard Zone A)							
3384	131	Poisonous by inhalation liquid, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.0 km (0.6 mi)	
3384	131	Toxic by inhalation liquid, flammable, n.o.s. (Inhalation Hazard Zone B)							
3385	139	Poisonous by inhalation liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)	60 m (200 ft)	0.6 km (0.4 mi)	1.2 km (0.8 mi)	200 m (600 ft)	2.2 km (1.4 mi)	4.2 km (2.6 mi)	
3385	139	Toxic by inhalation liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)							
3386	139	Poisonous by inhalation liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.2 mi)	60 m (200 ft)	0.5 km (0.3 mi)	0.7 km (0.5 mi)	
3386	139	Toxic by inhalation liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B)							

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		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during	
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
3387	142	Poisonous by inhalation liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)	60 m (200 ft)	0.6 km (0.4 mi)	1.2 km (0.8 mi)	2.2 km (1.4 mi)	4.2 km (2.6 mi)
3387	142	Toxic by inhalation liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)					
3388	142	Poisonous by inhalation liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)					
3388	142	Toxic by inhalation liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	0.4 km (0.3 mi)
3389	154	Poisonous by inhalation liquid, corrosive, n.o.s. (Inhalation Hazard Zone A)					
3389	154	Toxic by inhalation liquid, corrosive, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)	1.4 km (0.9 mi)	3.3 km (2.1 mi)
3390	154	Poisonous by inhalation liquid, corrosive, n.o.s. (Inhalation Hazard Zone B)					
3390	154	Toxic by inhalation liquid, corrosive, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	0.4 km (0.3 mi)	0.6 km (0.4 mi)

3456	157	Nitrosylsulfuric acid, solid (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.3 km (0.2 mi)	300 m (1000 ft)	1.0 km (0.6 mi)	2.9 km (1.8 mi)	
3456	157	Nitrosylsulphuric acid, solid (when spilled in water)							
3488	131	Poisonous by inhalation liquid, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)							
3488	131	Toxic by inhalation liquid, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)	0.9 km (0.6 mi)	2.0 km (1.2 mi)	400 m (1250 ft)	4.8 km (3.0 mi)	7.5 km (4.7 mi)	
3489	131	Poisonous by inhalation liquid, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)							
3489	131	Toxic by inhalation liquid, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.0 km (0.6 mi)	
3490	155	Poisonous by inhalation liquid, water-reactive, flammable, n.o.s. (Inhalation Hazard Zone A)							
3490	155	Toxic by inhalation liquid, water- reactive, flammable, n.o.s. (Inhalation Hazard Zone A)	60 m (200 ft)	0.5 km (0.3 mi)	1.5 km (0.9 mi)	300 m (1000 ft)	3.1 km (2.0 mi)	5.8 km (3.6 mi)	
3491	155	Poisonous by inhalation liquid, water-reactive, flammable, n.o.s. (Inhalation Hazard Zone B)							
3491	155	Toxic by inhalation liquid, water- reactive, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.0 km (0.6 mi)	

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ID No.		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 Meters (Feet)	Then PROTECT persons Downwind during		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		
3492	131	Poisonous by inhalation liquid, corrosive, flammable, n.o.s. (Inhalation Hazard Zone A)	0.9 km (0.6 mi)	2.0 km (1.2 mi)	400 m (1250 ft)	4.8 km (3.0 mi)	7.5 km (4.7 mi)		
3492	131	Toxic by inhalation liquid, corrosive, flammable, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)						
3493	131	Poisonous by inhalation liquid, corrosive, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.1 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.0 km (0.6 mi)		
3493	131	Toxic by inhalation liquid, corrosive, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)						
3494	131	Petroleum sour crude oil, flammable, poisonous	30 m (100 ft)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	0.7 km (0.5 mi)		
3494	131	Petroleum sour crude oil, flammable, toxic	30 m (100 ft)						
3507	166	Uranium hexafluoride, radioactive material, excepted package, less than 0.1 kg per package, non-fissile or fissile-excepted (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)		

3512	173	Adsorbed gas, poisonous, n.o.s.	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.2 km (0.2 mi)
3512	173	Adsorbed gas, poisonous, n.o.s. (Inhalation hazard zone A)					
3512	173	Adsorbed gas, poisonous, n.o.s. (Inhalation hazard zone B)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)
3512	173	Adsorbed gas, poisonous, n.o.s. (Inhalation hazard zone C)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)
3512	173	Adsorbed gas, poisonous, n.o.s. (Inhalation hazard zone D)					
3512	173	Adsorbed gas, toxic, n.o.s.	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.2 km (0.2 mi)
3512	173	Adsorbed gas, toxic, n.o.s. (Inhalation hazard zone A)					
3512	173	Adsorbed gas, toxic, n.o.s. (Inhalation hazard zone B)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)
3512	173	Adsorbed gas, toxic, n.o.s. (Inhalation hazard zone C)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)
3512	173	Adsorbed gas, toxic, n.o.s. (Inhalation hazard zone D)					
3514	173	Adsorbed gas, poisonous, flammable, n.o.s.	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.2 km (0.2 mi)
3514	173	Adsorbed gas, poisonous, flammable, n.o.s. (Inhalation hazard zone A)					

"+" means distance can be larger in certain atmospheric conditions

TABLE 1

TABLE 1 - INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.		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 Meters (Feet)	Then PROTECT persons Downwind during		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during	
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
3514	173	Adsorbed gas, poisonous, flammable, n.o.s. (Inhalation hazard zone B)					
3514	173	Adsorbed gas, poisonous, flammable, n.o.s. (Inhalation hazard zone C)	30 m (100 ft)	0.1 km (0.1 mi)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)
3514	173	Adsorbed gas, poisonous, flammable, n.o.s. (Inhalation hazard zone D)					
3514	173	Adsorbed gas, toxic; flammable, n.o.s.					
3514	173	Adsorbed gas, toxic, flammable, n.o.s. (Inhalation hazard zone A)	30 m (100 ft)	0.1 km (0.1 mi)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.2 mi)
3514	173	Adsorbed gas, toxic; flammable, n.o.s. (Inhalation hazard zone B)					
3514	173	Adsorbed gas, toxic, flammable, n.o.s. (Inhalation hazard zone C)	30 m (100 ft)	0.1 km (0.1 mi)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)
3514	173	Adsorbed gas, toxic; flammable, n.o.s. (Inhalation hazard zone D)					

3515	173	Adsorbed gas, poisonous, oxidizing, 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)	0.2 km (0.2 mi)	
3515	173	Adsorbed gas, poisonous, oxidizing, n.o.s. (Inhalation hazard zone A)	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)	0.2 km (0.2 mi)	
3515	173	Adsorbed gas, poisonous, oxidizing, n.o.s. (Inhalation hazard zone B)	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)	0.1 km (0.1 mi)	
3515	173	Adsorbed gas, poisonous, oxidizing, n.o.s. (Inhalation hazard zone C)	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)	0.1 km (0.1 mi)	
3515	173	Adsorbed gas, poisonous, oxidizing, n.o.s. (Inhalation hazard zone D)	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)	0.2 km (0.2 mi)	
3515	173	Adsorbed gas, toxic, oxidizing, 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)	0.2 km (0.2 mi)	
3515	173	Adsorbed gas, toxic, oxidizing, n.o.s. (Inhalation hazard zone A)	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)	0.1 km (0.1 mi)	
3515	173	Adsorbed gas, toxic, oxidizing, n.o.s. (Inhalation hazard zone B)	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)	0.1 km (0.1 mi)	
3515	173	Adsorbed gas, toxic, oxidizing, n.o.s. (Inhalation hazard zone C)	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)	0.1 km (0.1 mi)	
3515	173	Adsorbed gas, toxic, oxidizing, n.o.s. (Inhalation hazard zone D)	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)	0.2 km (0.2 mi)	
3516	173	Adsorbed gas, poisonous, corrosive, 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)	0.2 km (0.2 mi)	
3516	173	Adsorbed gas, poisonous, corrosive, n.o.s. (Inhalation hazard zone A)	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)	0.2 km (0.2 mi)	

"+" means distance can be larger in certain atmospheric conditions

TABLE 1

TABLE 1 - INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.		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 Meters (Feet)	Then PROTECT persons Downwind during		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during	
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
3516	173	Adsorbed gas, poisonous, corrosive, n.o.s. (Inhalation hazard zone B)					
3516	173	Adsorbed gas, poisonous, corrosive, n.o.s. (Inhalation hazard zone C)	30 m (100 ft)	0.1 km (0.1 mi)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)
3516	173	Adsorbed gas, poisonous, corrosive, n.o.s. (Inhalation hazard zone D)					
3516	173	Adsorbed gas, toxic, corrosive, n.o.s.					
3516	173	Adsorbed gas, toxic, corrosive, n.o.s. (Inhalation hazard zone A)	30 m (100 ft)	0.1 km (0.1 mi)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.2 mi)
3516	173	Adsorbed gas, toxic, corrosive, n.o.s. (Inhalation hazard zone B)					
3516	173	Adsorbed gas, toxic, corrosive, n.o.s. (Inhalation hazard zone C)	30 m (100 ft)	0.1 km (0.1 mi)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)
3516	173	Adsorbed gas, toxic, corrosive, n.o.s. (Inhalation hazard zone D)					
3517	173	Adsorbed gas, poisonous, flammable, corrosive, n.o.s.					
3517	173	Adsorbed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation hazard zone A)	30 m (100 ft)	0.1 km (0.1 mi)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.2 mi)

3517	173	Adsorbed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation hazard zone B)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)
3517	173	Adsorbed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation hazard zone C)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)
3517	173	Adsorbed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation hazard zone D)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)
3517	173	Adsorbed gas, toxic, flammable, corrosive, n.o.s.	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.2 km (0.2 mi)
3517	173	Adsorbed gas, toxic, flammable, corrosive, n.o.s. (Inhalation hazard zone A)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.2 km (0.2 mi)
3517	173	Adsorbed gas, toxic, flammable, corrosive, n.o.s. (Inhalation hazard zone B)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)
3517	173	Adsorbed gas, toxic, flammable, corrosive, n.o.s. (Inhalation hazard zone C)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)
3517	173	Adsorbed gas, toxic, flammable, corrosive, n.o.s. (Inhalation hazard zone D)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.2 km (0.2 mi)
3518	173	Adsorbed gas, poisonous, oxidizing, corrosive, n.o.s.	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.2 km (0.2 mi)
3518	173	Adsorbed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation hazard zone A)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	0.2 km (0.2 mi)

"+" means distance can be larger in certain atmospheric conditions

TABLE 1

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)			
ID No.	Guide	NAME OF MATERIAL	First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during		
				DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	
3518	173	Adsorbed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation hazard zone B)							
3518	173	Adsorbed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation hazard zone C)	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)	0.1 km (0.1 mi)	
3518	173	Adsorbed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation hazard zone D)							
3518	173	Adsorbed gas, toxic, oxidizing, corrosive, n.o.s.							
3518	173	Adsorbed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation hazard zone A)	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)	0.2 km (0.2 mi)	
3518	173	Adsorbed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation hazard zone B)							
3518	173	Adsorbed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation hazard zone C)	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)	0.1 km (0.1 mi)	
3518	173	Adsorbed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation hazard zone D)							
3519	173	Boron trifluoride, adsorbed	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)	0.1 km (0.1 mi)	
3520	173	Chlorine, adsorbed	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)	0.1 km (0.1 mi)	

3521	173	Silicon tetrafluoride, adsorbed	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)	0.1 km (0.1 mi)	0.1 km (0.1 mi)
3522	173	Arsine, adsorbed	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)	0.1 km (0.1 mi)	0.2 km (0.2 mi)
3523	173	Germane, adsorbed	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)	0.1 km (0.1 mi)	0.2 km (0.2 mi)
3524	173	Phosphorus pentafluoride, adsorbed	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)	0.1 km (0.1 mi)	0.1 km (0.1 mi)
3525	173	Phosphine, adsorbed	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)	0.1 km (0.1 mi)	0.1 km (0.1 mi)
3526	173	Hydrogen selenide, adsorbed	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)	0.1 km (0.1 mi)	0.4 km (0.3 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)	0.1 km (0.1 mi)	0.4 km (0.3 mi)
9191	143	Chlorine dioxide, hydrate, frozen (when spilled in water)	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	0.5 km (0.3 mi)
9202	168	Carbon monoxide, refrigerated liquid (cryogenic liquid)	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	200 m (600 ft)	1.2 km (0.7 mi)	4.3 km (2.7 mi)	
9206	137	Methyl phosphonic dichloride	30 m (100 ft)	0.1 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.4 km (0.3 mi)	0.6 km (0.4 mi)	
9263	156	Chloroacetaldehyde	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.2 km (0.2 mi)	0.3 km (0.2 mi)	
9264	151	3,5-Dichloro-2,4,6-trifluoropyridine	30 m (100 ft)	0.1 km (0.1 mi)	0.1 km (0.1 mi)	30 m (100 ft)	0.2 km (0.2 mi)	0.3 km (0.2 mi)	
9269	132	Trimethoxysilane	30 m (100 ft)	0.2 km (0.2 mi)	0.6 km (0.4 mi)	100 m (300 ft)	1.3 km (0.8 mi)	2.3 km (1.5 mi)	

See Next Page for Table of Water-Reactive Materials Which Produce Toxic Gases

"+" means distance can be larger in certain atmospheric conditions

TABLE 1

HOW TO USE TABLE 2 – WATER-REACTIVE MATERIALS THAT PRODUCE TOXIC GASES

Table 2 lists materials that produce large amounts of Toxic Inhalation Hazard (TIH) (PIH in the US) gases when spilled in water, and identifies the TIH gases produced.

The materials are listed by order of ID number.

These Water-Reactive materials are easily identified in Table 1 as their name is immediately followed by **(when spilled in water)**.

Note 1: The TIH gases indicated in Table 2 are for information purposes only. In Table 1, the initial isolation and protective action distances have already taken into consideration the TIH gases produced.

For example: Table 2 indicates that UN1689 sodium cyanide, when spilled in water, will generate hydrogen cyanide gas (HCN). In Table 1, you must refer to the distances for sodium cyanide and not the distances for hydrogen cyanide gas.

Note 2: Some Water-Reactive materials are also TIH materials themselves (e.g., UN1746 (Bromine trifluoride), UN1836 (Thionyl chloride)). In these instances, two entries are provided in Table 1 for land-based and water-based spills. If a water-reactive material only has one entry in Table 1 for **(when spilled in water)**, and the product is **NOT** spilled in water, Tables 1 and 2 do **NOT** apply. Refer only to the appropriate orange-bordered guide.

Note 3: Materials classified as a Division 4.3 are substances that, on contact with water, are liable to become spontaneously **FLAMMABLE** or give off **FLAMMABLE** or sometimes **TOXIC** gases in dangerous quantities. For the purpose of this table, water-reactive materials are materials that generate substantial quantities of **TOXIC** gases rapidly after a spill into water; therefore, a material classified as a Division 4.3 will not always be included in Table 2.

TABLE 2 - WATER-REACTIVE MATERIALS WHICH PRODUCE TOXIC GASES

**Materials Which Produce Large Amounts of Toxic-by-Inhalation (TIH)
(PIH in the US) Gas(es) When Spilled in Water**

ID No.	Guide No.	Name of Material	TIH Gas(es) Produced
1162	155	Dimethyldichlorosilane	HCl
1183	139	Ethyldichlorosilane	HCl
1196	155	Ethyltrichlorosilane	HCl
1242	139	Methyldichlorosilane	HCl
1250	155	Methyltrichlorosilane	HCl
1295	139	Trichlorosilane	HCl
1298	155	Trimethylchlorosilane	HCl
1305	155P	Vinyltrichlorosilane	HCl
1305	155P	Vinyltrichlorosilane, stabilized	HCl
1340	139	Phosphorus pentasulfide, free from yellow and white Phosphorus	H ₂ S
1340	139	Phosphorus pentasulphide, free from yellow and white Phosphorus	H ₂ S
1360	139	Calcium phosphide	PH ₃
1384	135	Sodium dithionite	H ₂ S SO ₂
1384	135	Sodium hydrosulfite	H ₂ S SO ₂
1384	135	Sodium hydrosulphite	H ₂ S SO ₂
1390	139	Alkali metal amides	NH ₃
1397	139	Aluminum phosphide	PH ₃
1419	139	Magnesium aluminum phosphide	PH ₃
1432	139	Sodium phosphide	PH ₃
1541	155	Acetone cyanohydrin, stabilized	HCN
1680	157	Potassium cyanide, solid	HCN
1689	157	Sodium cyanide, solid	HCN

Chemical Symbols for TIH (PIH in the US) Gases:

Br ₂	Bromine	HF	Hydrogen fluoride	NO ₂	Nitrogen dioxide
Cl ₂	Chlorine	HI	Hydrogen iodide	PH ₃	Phosphine
HBr	Hydrogen bromide	H ₂ S	Hydrogen sulfide	SO ₂	Sulfur dioxide
HCl	Hydrogen chloride	H ₂ S	Hydrogen sulphide	SO ₂	Sulphur dioxide
HCN	Hydrogen cyanide	NH ₃	Ammonia		

TABLE 2

TABLE2 - WATER-REACTIVE MATERIALS WHICH PRODUCE TOXIC GASES

**Materials Which Produce Large Amounts of Toxic-by-Inhalation (TIH)
(PIH in the US) Gas(es) When Spilled in Water**

ID No.	Guide No.	Name of Material	TIH Gas(es) Produced
1716	156	Acetyl bromide	HBr
1717	155	Acetyl chloride	HCl
1724	155	Allyltrichlorosilane, stabilized	HCl
1725	137	Aluminum bromide, anhydrous	HBr
1726	137	Aluminum chloride, anhydrous	HCl
1728	155	Amyltrichlorosilane	HCl
1732	157	Antimony pentafluoride	HF
1741	125	Boron trichloride	HCl
1745	144	Bromine pentafluoride	HF Br ₂
1746	144	Bromine trifluoride	HF Br ₂
1747	155	Butyltrichlorosilane	HCl
1752	156	Chloroacetyl chloride	HCl
1753	156	Chlorophenyltrichlorosilane	HCl
1754	137	Chlorosulfonic acid (with or without sulfur trioxide)	HCl
1754	137	Chlorosulphonic acid (with or without sulphur trioxide)	HCl
1758	137	Chromium oxychloride	HCl
1762	156	Cyclohexenyltrichlorosilane	HCl
1763	156	Cyclohexyltrichlorosilane	HCl
1765	156	Dichloroacetyl chloride	HCl
1766	156	Dichlorophenyltrichlorosilane	HCl
1767	155	Diethyldichlorosilane	HCl
1769	156	Dipenyldichlorosilane	HCl
1771	156	Dodecyltrichlorosilane	HCl

Chemical Symbols for TIH (PIH in the US) Gases:

Br ₂	Bromine	HF	Hydrogen fluoride	NO ₂	Nitrogen dioxide
Cl ₂	Chlorine	HI	Hydrogen iodide	PH ₃	Phosphine
HBr	Hydrogen bromide	H ₂ S	Hydrogen sulfide	SO ₂	Sulfur dioxide
HCl	Hydrogen chloride	H ₂ S	Hydrogen sulphide	SO ₂	Sulphur dioxide
HCN	Hydrogen cyanide	NH ₃	Ammonia		

TABLE 2 - WATER-REACTIVE MATERIALS WHICH PRODUCE TOXIC GASES

**Materials Which Produce Large Amounts of Toxic-by-Inhalation (TIH)
(PIH in the US) Gas(es) When Spilled in Water**

ID No.	Guide No.	Name of Material	TIH Gas(es) Produced
1777	137	Fluorosulfonic acid	HF
1777	137	Fluorosulphonic acid	HF
1781	156	Hexadecyltrichlorosilane	HCl
1784	156	Hexyltrichlorosilane	HCl
1799	156	Nonyltrichlorosilane	HCl
1800	156	Octadecyltrichlorosilane	HCl
1801	156	Octyltrichlorosilane	HCl
1804	156	Phenyltrichlorosilane	HCl
1806	137	Phosphorus pentachloride	HCl
1808	137	Phosphorus tribromide	HBr
1809	137	Phosphorus trichloride	HCl
1810	137	Phosphorus oxychloride	HCl
1815	132	Propionyl chloride	HCl
1816	155	Propyltrichlorosilane	HCl
1818	157	Silicon tetrachloride	HCl
1828	137	Sulfur chlorides	HCl SO ₂ H ₂ S
1828	137	Sulphur chlorides	HCl SO ₂ H ₂ S
1834	137	Sulfuryl chloride	HCl
1834	137	Sulphuryl chloride	HCl
1836	137	Thionyl chloride	HCl SO ₂
1838	137	Titanium tetrachloride	HCl
1898	156	Acetyl iodide	HI
1923	135	Calcium dithionite	H ₂ S SO ₂

Chemical Symbols for TIH (PIH in the US) Gases:

Br ₂	Bromine	HF	Hydrogen fluoride	NO ₂	Nitrogen dioxide
Cl ₂	Chlorine	HI	Hydrogen iodide	PH ₃	Phosphine
HBr	Hydrogen bromide	H ₂ S	Hydrogen sulfide	SO ₂	Sulfur dioxide
HCl	Hydrogen chloride	H ₂ S	Hydrogen sulphide	SO ₂	Sulphur dioxide
HCN	Hydrogen cyanide	NH ₃	Ammonia		

TABLE 2

TABLE2 - WATER-REACTIVE MATERIALS WHICH PRODUCE TOXIC GASES

**Materials Which Produce Large Amounts of Toxic-by-Inhalation (TIH)
(PIH in the US) Gas(es) When Spilled in Water**

ID No.	Guide No.	Name of Material	TIH Gas(es) Produced
1923	135	Calcium hydrosulfite	H ₂ S SO ₂
1923	135	Calcium hydrosulphite	H ₂ S SO ₂
1929	135	Potassium dithionite	H ₂ S SO ₂
1929	135	Potassium hydrosulfite	H ₂ S SO ₂
1929	135	Potassium hydrosulphite	H ₂ S SO ₂
1931	171	Zinc dithionite	H ₂ S SO ₂
1931	171	Zinc hydrosulfite	H ₂ S SO ₂
1931	171	Zinc hydrosulphite	H ₂ S SO ₂
2004	135	Magnesium diamide	NH ₃
2011	139	Magnesium phosphide	PH ₃
2012	139	Potassium phosphide	PH ₃
2013	139	Strontium phosphide	PH ₃
2308	157	Nitrosylsulfuric acid, liquid	NO ₂
2308	157	Nitrosylsulphuric acid, liquid	NO ₂
2353	132	Butyryl chloride	HCl
2395	132	Isobutyryl chloride	HCl
2434	156	Dibenzylchlorosilane	HCl
2435	156	Ethylphenylchlorosilane	HCl
2437	156	Methylphenylchlorosilane	HCl
2495	144	Iodine pentafluoride	HF
2691	137	Phosphorus pentabromide	HBr
2692	157	Boron tribromide	HBr
2806	139	Lithium nitride	NH ₃

Chemical Symbols for TIH (PIH in the US) Gases:

Br ₂	Bromine	HF	Hydrogen fluoride	NO ₂	Nitrogen dioxide
Cl ₂	Chlorine	HI	Hydrogen iodide	PH ₃	Phosphine
HBr	Hydrogen bromide	H ₂ S	Hydrogen sulfide	SO ₂	Sulfur dioxide
HCl	Hydrogen chloride	H ₂ S	Hydrogen sulphide	SO ₂	Sulphur dioxide
HCN	Hydrogen cyanide	NH ₃	Ammonia		

TABLE 2 - WATER-REACTIVE MATERIALS WHICH PRODUCE TOXIC GASES

**Materials Which Produce Large Amounts of Toxic-by-Inhalation (TIH)
(PIH in the US) Gas(es) When Spilled in Water**

ID No.	Guide No.	Name of Material	TIH Gas(es) Produced
2965	139	Boron trifluoride dimethyl etherate	HF
2977	166	Radioactive material, Uranium hexafluoride, fissile	HF
2977	166	Uranium hexafluoride, radioactive material, fissile	HF
2978	166	Radioactive material, Uranium hexafluoride, non fissile or fissile-excepted	HF
2978	166	Uranium hexafluoride, radioactive material, non fissile or fissile-excepted	HF
2985	155	Chlorosilanes, flammable, corrosive, n.o.s	HCl
2986	155	Chlorosilanes, corrosive, flammable, n.o.s	HCl
2987	156	Chlorosilanes, corrosive, n.o.s	HCl
2988	139	Chlorosilanes, water-reactive, flammable, corrosive, n.o.s.	HCl
3048	157	Aluminum phosphide pesticide	PH ₃
3361	156	Chlorosilanes, poisonous, corrosive, n.o.s.	HCl
3361	156	Chlorosilanes, toxic, corrosive, n.o.s.	HCl
3362	155	Chlorosilanes, poisonous, corrosive, flammable, n.o.s.	HCl
3362	155	Chlorosilanes, toxic, corrosive, flammable, n.o.s.	HCl
3456	157	Nitrosylsulfuric acid, solid	NO ₂
3456	157	Nitrosylsulphuric acid, solid	NO ₂
3507	166	Uranium hexafluoride, radioactive material, excepted package, less than 0.1 kg per package, non-fissile or fissile-excepted	HF
9191	143	Chlorine dioxide, hydrate, frozen	Cl ₂

TABLE 2

Chemical Symbols for TIH (PIH in the US) Gases:

Br ₂	Bromine	HF	Hydrogen fluoride	NO ₂	Nitrogen dioxide
Cl ₂	Chlorine	HI	Hydrogen iodide	PH ₃	Phosphine
HBr	Hydrogen bromide	H ₂ S	Hydrogen sulfide	SO ₂	Sulfur dioxide
HCl	Hydrogen chloride	H ₂ S	Hydrogen sulphide	SO ₂	Sulphur dioxide
HCN	Hydrogen cyanide	NH ₃	Ammonia		

HOW TO USE TABLE 3 – INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES FOR LARGE SPILLS FOR DIFFERENT QUANTITIES OF SIX COMMON TIH (PIH in the US) GASES

Table 3 lists Toxic Inhalation Hazard (TIH) materials that may be more commonly encountered.

The selected materials are:

- UN1005 - Ammonia, anhydrous
- UN1017 - Chlorine
- UN1040 - Ethylene oxide and UN1040 – Ethylene oxide with nitrogen
- UN1050 - Hydrogen chloride, anhydrous and UN2186 - and Hydrogen chloride, refrigerated liquid
- UN1052 - Hydrogen fluoride, anhydrous
- UN1079 - Sulfur dioxide/Sulphur dioxide

The materials are presented in numerical order of ID number and provide Initial Isolation and Protective Action Distances **FOR LARGE SPILLS** (more than 208 liters or 55 US gallons) involving different container types (therefore different volume capacities, see below) for day time and night time situations and different wind speeds.

- Rail tank car: 80 000 kg (176 368 lbs.)
- Highway tank truck or trailer: 20 000 – 25 000 kg (44 092 – 55 115 lbs.)
- Agricultural nurse tank: 3785 L (1000 gallons)
- Small cylinder: 72 L (19 gallons)
- Ton cylinder: 757 - 1135 L (200 - 300 gallons)

Estimating Wind Speed from Environmental Clues

mph	km/h	Wind Description	Specifications
< 6	< 10	Low wind	Wind felt on face; leaves rustle; ordinary vane moved by wind
6 - 12	10 - 20	Moderate wind	Raises dust, loose paper; small branches are moved
> 12	> 20	High wind	Large branches in motion; whistling heard in telephone wires; umbrellas used with difficulty

(Data taken from the Beaufort Wind Scale has been reworked in order to create 3 categories of wind speed: Low, Moderate and High)

TABLE 3 - INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES FOR LARGE SPILLS FOR DIFFERENT QUANTITIES OF SIX COMMON TIH (PIH in the US) GASES

	First ISOLATE in all Directions	Then PROTECT persons Downwind during							
		DAY				NIGHT			
		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									
UN1005 Ammonia, anhydrous: Large Spills									
Rail tank car	300 (1000)	1.9 (1.2)	1.5 (0.9)	1.1 (0.6)		4.5 (2.8)	2.5 (1.5)	1.4 (0.9)	
Highway tank truck or trailer	150 (500)	0.9 (0.6)	0.5 (0.3)	0.4 (0.3)		2.0 (1.3)	0.8 (0.5)	0.6 (0.4)	
Agricultural nurse tank	60 (200)	0.5 (0.3)	0.3 (0.2)	0.3 (0.2)		1.4 (0.9)	0.3 (0.2)	0.3 (0.2)	
Multiple small cylinders	30 (100)	0.3 (0.2)	0.2 (0.1)	0.1 (0.1)		0.7 (0.5)	0.3 (0.2)	0.2 (0.1)	
TRANSPORT CONTAINER									
UN1017 Chlorine: Large Spills									
Rail tank car	1000 (3000)	10.1 (6.3)	6.8 (4.2)	5.3 (3.3)		11+ (7+)	9.2 (5.7)	6.9 (4.3)	
Highway tank truck or trailer	600 (2000)	5.8 (3.6)	3.4 (2.1)	2.9 (1.8)		6.7 (4.3)	5.0 (3.1)	4.1 (2.5)	
Multiple ton cylinders	300 (1000)	2.1 (1.3)	1.3 (0.8)	1.0 (0.6)		4.0 (2.5)	2.4 (1.5)	1.3 (0.8)	
Multiple small cylinders or single ton cylinder	150 (500)	1.5 (0.9)	0.8 (0.5)	0.5 (0.3)		2.9 (1.8)	1.3 (0.8)	0.6 (0.4)	

TABLE 3

"+" means distance can be larger in certain atmospheric conditions

TABLE 3 - INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES FOR LARGE SPILLS FOR DIFFERENT QUANTITIES OF SIX COMMON TIH (PIH in the US) GASES

	First ISOLATE in all Directions	Then PROTECT persons Downwind during							
		DAY				NIGHT			
		Low wind (< 6 mph = < 10 km/h) km (Miles)	Moderate wind (6-12 mph = 10 - 20 km/h) km (Miles)	High wind (> 12 mph = > 20 km/h) km (Miles)	Low wind (< 6 mph = < 10 km/h) km (Miles)	Moderate wind (6-12 mph = 10 - 20 km/h) km (Miles)	High wind (> 12 mph = > 20 km/h) km (Miles)		
	Meters (Feet)								
UN1040 Ethylene oxide: Large Spills									
UN1040 Ethylene oxide with Nitrogen: Large Spills									
TRANSPORT CONTAINER									
Rail tank car	200 (600)	1.6 (1.0)	0.8 (0.5)	0.7 (0.5)	3.3 (2.1)	1.4 (0.9)	0.8 (0.5)		
Highway tank truck or trailer	100 (300)	0.9 (0.6)	0.5 (0.3)	0.4 (0.3)	2.0 (1.3)	0.7 (0.4)	0.4 (0.3)		
Multiple small cylinders or single ton cylinder	30 (100)	0.4 (0.3)	0.2 (0.1)	0.1 (0.1)	0.9 (0.6)	0.3 (0.2)	0.2 (0.1)		
UN1050 Hydrogen chloride, anhydrous: Large Spills									
UN2186 Hydrogen chloride, refrigerated liquid: Large Spills									
TRANSPORT CONTAINER									
Rail tank car	500 (1500)	3.9 (2.5)	2.1 (1.2)	1.8 (1.2)	10.1 (6.3)	3.5 (2.2)	2.3 (1.5)		
Highway tank truck or trailer	200 (600)	1.5 (0.9)	0.8 (0.5)	0.6 (0.4)	3.9 (2.5)	1.5 (0.9)	0.8 (0.5)		
Multiple ton cylinders	30 (100)	0.4 (0.3)	0.2 (0.1)	0.1 (0.1)	1.1 (0.7)	0.3 (0.2)	0.2 (0.1)		
Multiple small cylinders or single ton cylinder	30 (100)	0.3 (0.2)	0.2 (0.1)	0.1 (0.1)	0.9 (0.6)	0.3 (0.2)	0.2 (0.1)		

TABLE 3 - INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES FOR LARGE SPILLS FOR DIFFERENT QUANTITIES OF SIX COMMON TIH (PIH in the US) GASES

	First ISOLATE in all Directions	Then PROTECT persons Downwind during					
		DAY			NIGHT		
		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)
UN1052 Hydrogen fluoride, anhydrous: Large Spills							
TRANSPORT CONTAINER							
Rail tank car	500 (1500)	3.5 (2.2)	2.1 (1.3)	1.8 (1.2)	6.6 (4.1)	3.1 (1.9)	2.0 (1.2)
Highway tank truck or trailer	200 (700)	2.0 (1.2)	1.0 (0.7)	0.9 (0.6)	3.7 (2.3)	1.6 (1.0)	0.9 (0.6)
Multiple small cylinders or single ton cylinder	100 (300)	0.8 (0.5)	0.4 (0.2)	0.3 (0.2)	1.7 (1.1)	0.5 (0.3)	0.3 (0.2)
UN1079 Sulfur dioxide/Sulphur dioxide: Large Spills							
TRANSPORT CONTAINER							
Rail tank car	1000 (3000)	11+ (7+)	11+ (7+)	7.2 (4.5)	11+ (7+)	11+ (7+)	10.1 (6.3)
Highway tank truck or trailer	1000 (3000)	11+ (7+)	6.2 (3.8)	5.3 (3.3)	11+ (7+)	8.2 (5.1)	6.2 (3.9)
Multiple ton cylinders	500 (1500)	5.4 (3.4)	2.4 (1.5)	1.8 (1.1)	7.8 (4.8)	4.2 (2.6)	2.9 (1.8)
Multiple small cylinders or single ton cylinder	200 (600)	3.2 (2.0)	1.5 (0.9)	1.1 (0.7)	5.8 (3.6)	2.5 (1.6)	1.5 (0.9)

TABLE 3

"+" means distance can be larger in certain atmospheric conditions