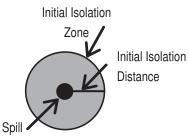
HOW TO USE TABLE 1 – INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

- (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.

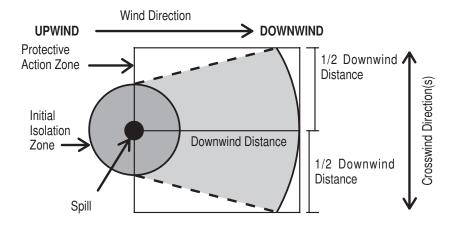


(5) Look up the PROTECTIVE ACTION DISTANCE.

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.

			(From a s	SMALL SPILLS (From a small package or small leak from a large package)	MALL :	SMALL SPILLS kage or small leak fro	ım a large	package)	(Fro	ım a large p	LARGE	LARGE SPILLS (From a large package or from many small packages)	small pack	ges)
			Fi ISOL	First ISOLATE in all Directions	De	Then PROTECT persons Downwind during	Then PROTECT Is Downwind du	ring		First ISOLATE in all Directions	<u> </u>	Then PROTECT persons Downwind during	en IECT nwind durir	D.
<u>0</u> %	Guide	NAME OF MATERIAL	Meters	(Feet)	D Kilomete	DAY Kilometers (Miles)	NIC Kilomete	NIGHT Kilometers (Miles)	Meters	s (Feet)	I Kilomet	DAY Kilometers (Miles)	NK Kilomete	NIGHT Kilometers (Miles)
	117	AC (when used as a weapon)	ш 09	(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)	m 09	(200 ft)	0.3 km	(0.2 mi)	1.4 km	(im 6:0)
	153	Buzz (when used as a weapon)	m 09	(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)	m 09	(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	(£000 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)	m 09	(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)	m 09	(200 ft)	0.2 km	(0.2 mi)	1.1 km	(0.7 mi)	200 m	(e00 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)	m 09	(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)	m 09	(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	(e00 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 G	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)
	1 53 G	GD (when used as a weapon)	m 09	(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 G	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	H (when used as a weapon)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	ш 09	(200 ft)	0.3 km	(0.2 mi)	0.4 km	(0.3 mi)
	153 HI	HD (when used as a weapon)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	ш 09	(200 ft)	0.3 km	(0.2 mi)	0.4 km	(0.3 mi)
	153 HI	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 HI	HN-1 (when used as a weapon)	ш 09	(200 ft)	0.3 km	(0.2 mi)	0.5 km	(0.3 mi)	200 m	(e00 ft)	1.1 km	(0.7 mi)	1.8 km	(1.1 mi)
	153 HI	HN-2 (when used as a weapon)	ш 09	(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 HI	HN-3 (when used as a weapon)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	m 09	(200 ft)	0.3 km	(0.2 mi)	0.3 km	(0.2 mi)
	153 L (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 Lе (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 M	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 M (Mustard (when used as a weapon)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	e0 m	(200 ft)	0.3 km	(0.2 mi)	0.4 km	(0.3 mi)
	153 M (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 PI	PD (when used as a weapon)	m 09	(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 S/	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)
-	1 53 Se	Sarin (when used as a weapon)	e0 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)

			(From a s	S mall pack	SMALL SPILLS kage or small leak from	SPILLS all leak fro	m a large	SMALL SPILLS From a small package or small leak from a large package)	(Fro	m a large p	LARGE SPILLS (From a large package or from many small packages)	LARGE SPILLS tokage or from many s	mall packa	ges)
			First ISOLATE	st ATE	Der	Then PROTECT persons Downwind during	Then PROTECT s Downwind du	ring	SO ::	First ISOLATE	90	Then PROTECT Dersons Downwind during	ECT	
ე გ	Guide	NAME OF MATERIAL	Meters (Feet)	(Feet)	DAY Kilometers (DAY Kilometers (Miles)	NIC Kilomete	NIGHT Kilometers (Miles)	Meters	Meters (Feet)	Ziomete	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	iHT 's (Miles)
	153	Soman (when used as a weapon)	m 09	(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)	m 09	(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)	m 09	(200 ft)	0.4 km	(0.2 mi)	0.3 km	(0.2 mi)
1005	125 125	Ammonia, anhydrous Anhydrous ammonia	30 m	(100 ft)	0.1 km	(0.1 mi)	0.2 km	(0.1 mi)			Refer to	Refer to table 3		
1008	125 125	Boron trifluoride Boron trifluoride, compressed	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)
1016	119	Carbon monoxide Carbon monoxide, compressed	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)
1017	124	Chlorine	60 m	(200 ft)	0.3 km	(0.2 mi)	1.4 km	(0.9 mi)			Refer to	Refer to table 3		
1026	119	Cyanogen	30 m	(100 ft)	0.1 km	(0.1 mi)	0.4 km	(0.3 mi)	e0 m	(200 ft)	0.3 km	(0.2 mi)	1.1 km	(0.7 mi)
1040	119P 119P	Ethylene oxide Ethylene oxide with Nitrogen	30 m	(100 ft)	0.1 km	(0.1 mi)	0.2 km	(0.2 mi)			Refer to	Refer to table 3		
1045 1045	124 124	Fluorine Fluorine, compressed	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)
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	Refer to table 3		

(1.1 mi)		(3.9 mi)	(1.3 mi)	(0.5 mi)	(2.6 mi)	(2.1 mi)	(6.7 mi)	(5.7 mi)		(0.5 mi)	(6.7 mi)	(1.4 mi)	(0.8 mi)	(0.1 mi)	(0.5 mi)	
1.7 km		6.3 km	2.1 km	0.8 km	4.1 km	3.3 km	10.8 km	9.2 km		0.8 km	10.8 km	2.3 km	1.2 km	0.1 km	0.7 km	
(0.5 mi)	Refer to table 3	(1.4 mi)	(0.4 mi)	(0.2 mi)	(0.8 mi)	(0.9 mi)	(2.7 mi)	(1.8 mi)	Refer to table 3	(0.2 mi)	(3.8 mi)	(0.8 mi)	(0.5 mi)	(0.1 mi)	(0.3 mi)	
0.7 km	Refer to	2.2 km	0.7 km	0.3 km	1.3 km	1.4 km	4.3 km	2.9 km	Refer to	0.4 km	6.1 km	1.2 km	0.7 km	0.1 km	0.5 km	
(000 ft)		(1250 ft)	(H 009)	(500 ft)	(900 ft)	(1250 ft)	(2500 ft)	(1500 ft)		(200 ft)	(1500 ft)	(300 ft)	(200 ft)	(100 ft)	(200 ft)	
200 m		400 m	200 m	150 m	200 m	400 m	800 m	500 m		ш 09	500 m	100 m	90 m	30 m	e0 m	
(0.4 mi)	(0.3 mi)	(0.3 mi)	(0.1 mi)	(0.1 mi)	(0.2 mi)	(0.3 mi)	(0.6 mi)	(1.5 mi)	(1.6 mi)	(0.1 mi)	(2.1 mi)	(0.4 mi)	(0.2 mi)	(0.1 mi)	(0.1 mi)	
0.6 km	0.5 km	0.5 km	0.2 km	0.1 km	0.3 km	0.4 km	1.0 km	2.4 km	2.5 km	0.1 km	3.3 km	0.6 km	0.3 km	0.1 km	0.2 km	
(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.2 mi)	(0.4 mi)	(0.4 mi)	(0.1 mi)	(0.8 mi)	(0.2 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	
0.2 km	0.1 km	0.1 km	0.1 km	0.1 km	0.1 km	0.1 km	0.2 km	0.6 km	0.6 km	0.1 km	1.2 km	0.2 km	0.2 km	0.1 km	0.1 km	
(200 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(300 ft)	(300 ft)	(100 ft)	(300 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	
m 09	30 m	30 m	30 m	30 m	30 m	30 m	30 m	100 m	100 m	30 m	100 m	30 m	30 m	30 m	30 m	
Hydrogen cyanide, anhydrous, stabilized Hydrogen cyanide, stabilized	Hydrogen fluoride, anhydrous	Hydrogen sulfide Hydrogen sulphide	Methylamine, anhydrous	Methyl bromide	Methyl mercaptan	Dinitrogen tetroxide Nitrogen dioxide	Nitrosyl chloride	Phosgene	Sulfur dioxide Sulphur dioxide	Refrigerant gas R-1113 Trifluorochloroethylene, stabilized	Acrolein, stabilized	Acrylonitrile, stabilized	Allyl alcohol	Ethylene chlorohydrin	Crotonaldehyde Crotonaldehyde, stabilized	
117P 117P	125	117	118	123	117	124 124	125	125	125 125	119P 119P	131P	131P	131	131	131P 131P	
1051	1052	1053 1053	1061	1062	1064	1067 1067	1069	1076	1079 1079	1082	1092	1093	1098	1135	1143	

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

			(From a s	SMALL SPILLS (From a small package or small leak from a large package)	SMALL SPILLS kage or small leak from	SPILLS all leak fro	om a large	package)	(Fro	m a large p	LARGE SPILLS (From a large package or from many small packages)	SPILLS rom many s	small packa	(sebt
			Fil ISOL	First ISOLATE in all Directions	De d	Then PROTECT persons Downwind during	Then PROTECT s Downwind du	ring	ISOI	First ISOLATE in all Directions	8	Then PROTECT persons Downwind during	ECT Wind durin	<u> </u>
9.0	Guide	NAME OF MATERIAL	Meters	(Feet)	DAY Kilometers	DAY Kilometers (Miles)	NIC Kilomete	NIGHT Kilometers (Miles)	Meters	(Feet)	D Kilomete	DAY Kilometers (Miles)	NIC Kilomete	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)	m 09	(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)	e0 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)	ш 09	(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	(t) (009)	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	(e00 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	(£00 ft)	1.1 km	(0.7 mi)	2.1 km	(1.3 mi)
1239	131	Methyl chloromethyl ether	e0 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)	m 09	(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)	e0 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)

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(1.3 mi)	(im 6.0)	, E	(IIII 7: I.)		(0.9 mi)	(2.2 mi)	(3.9 mi)		(1.6 mi)		(1.4 mi)	(4.0 mi)	
2.1 km	1.4 km	\$ •	 N		1.4 km	3.5 km	6.2 km		2.5 km		2.2 km	6.5 km	
(0.4 mi)	(0.3 mi)		(0.4 IIII)		(0.2 mi)	(0.6 mi)	(1.7 mi)		(0.4 mi)		(0.4 mi)	(1.2 mi)	
0.6 km	0.5 km	\$ 2	0.0		0.3 km	1.0 km	2.7 km		0.6 km		0.6 km	2.0 km	
(200 ft)	(200 ft)	((1007)		(200 ft)	(1000 ft)	(600 ft)		(200 ft)		(200 ft)	(1500 ft)	
e0 m	e0 m	{ C	II 00		ш 09	300 m	200 m		ш 09		m 09	500 m	
(0.1 mi)	(0.1 mi)		(0.1 IIII)		(0.1 mi)	(0.3 mi)	(1.2 mi)		(0.3 mi)		(0.2 mi)	(0.5 mi)	
0.1 km	0.1 km	<u> </u>	 		0.1 km	0.4 km	1.9 km		0.4 km		0.3 km	0.7 km	
(0.1 mi)	(0.1 mi)	- E	0.1 KIII (0.1 IIII) 0.1 KIII		(0.1 mi)	(0.1 mi)	(0.4 mi)		0.1 km (0.1 mi) 0.4 km (0.3 mi)		(0.1 mi)	(0.1 mi)	
0.1 km	0.1 km				0.1 km	0.1 km	0.6 km				0.1 km	0.1 km	
(100 ft)	(100 ft)	\$	(110011)		(100 ft)	(100 ft)	(200 ft)		(100 ft)		(100 ft)	(100 ft)	
30 m	30 m	5	000		30 m	30 m	e0 m		30 m		30 m	30 m	
Trichlorosilane (when spilled in water)	Trimethylchlorosilane (when spilled in water)	Vinyltrichlorosilane (when spilled in water)	Vinyltrichlorosilane, stabilized (when spilled in water)	Phosphorus pentasulfide, free from yellow and white Phosphorus	(when spilled in water) Phosphorus pentasulphide, free from yellow and white Phosphorus (when spilled in water)	Calcium phosphide (when spilled in water)	Pentaborane	Sodium dithionite (when spilled in water)	Sodium hydrosulfite (when spilled in water)	Sodium hydrosulphite (when spilled in water)	Alkali metal amides (when spilled in water)	Aluminum phosphide (when spilled in water)	
139	155	155P	155P	139	139	139	135	135	135	135	139	139	
1295	1298	1305	1305	1340	1340	1360	1380	1384	1384	1384	1390	1397	

			(From a	SMALL SPILLS From a small package or small leak from a large package)	SMALL age or sm	SMALL SPILLS kage or small leak fro	ım a large	package)		n a large p	LARGE SPILLS (From a large package or from many small packages)	LARGE SPILLS ckage or from many s	mall packa	(seb
			F SO	First ISOLATE In all Directions	ed	Then PROTECT persons Downwind during	Then PROTECT IS Downwind dur	ring	I SO In all D	First ISOLATE in all Directions	ed	Then PROTECT persons Downwind during	ECT Wind durin	0
₽ .	Guide	Guide NAME OF MATERIAL	Meters	(Feet)	D Kilomete	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	NIGHT eters (Miles)	Meters	(Feet)	D Kilometε	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	i HT 's (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)	(0.4 mi)	500 m	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)	ш 09	(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 1560	157 157	Arsenic chloride Arsenic trichloride	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)
1569	131	Bromoacetone	30 m	(100 ft)	0.4 km	(0.3 mi)	1.2 km	(0.7 mi)	150 m	(200 ft)	1.6 km	(1.0 mi)	3.2 km	(2.0 mi)
1580	154	Chloropicrin	m 09	(200 ft)	0.5 km	(0.3 mi)	1.2 km	(0.8 mi)	200 m	(t) (009)	2.2 km	(1.4 mi)	3.6 km	(2.3 mi)
1581	123	Chloropicrin and Methyl bromide mixture Methyl bromide and Chloropicrin mixture	30 m	(100 ft)	0.1 km	(0.1 mi) 0.6 km (0.4 mi)	0.6 km	(0.4 mi)	300 m	300 m (1000 ft)	2.1 km	(1.3 mi)	5.9 km	(3.7 mi)
1582	119	Chloropicrin and Methyl chloride mixture Methyl chloride and Chloropicrin mixture	30 m	(100 ft)	0.1 km	(0.1 mi) 0.4 km	0.4 km	(0.3 mi)	m 09	(200 ft)	0.4 km	(0.2 mi)	1.7 km	(1.1 mi)
1583	154	Chloropicrin mixture, n.o.s.	m 09	(200 ft)	0.5 km	(0.3 mi)	1.2 km	(0.8 mi)	200 m	(e00 ft)	2.2 km	(1.4 mi)	3.6 km	(2.3 mi)

(7.0+ mi)	(0.4 mi)	(0.1 mi)	(5.1 mi)	(0.7 mi)	(0.9 mi)	(0.5 mi)	(1.4 mi)	(0.8 mi)	(0.4 mi)	(0.6 mi)	(0.7 mi)	
11.0+ km	0.6 km	0.2 km	8.1 km	1.1 km	1.5 km	0.8 km	2.2 km	1.2 km	0.7 km	1.0 km	1.2 km	
(6.0 mi)	(0.3 mi)	(0.1 mi)	(2.2 mi)	(0.3 mi)	(0.3 mi)	(0.2 mi)	(0.4 mi)	(0.5 mi)	(0.3 mi)	(0.2 mi)	(0.2 mi)	
9.7 km	0.5 km	0.1 km	3.5 km	0.5 km	0.5 km	0.3 km	0.6 km	0.8 km	0.5 km	0.2 km	0.3 km	
(3000 ft)	(200 ft)	(100 ft)	(1250 ft)	(300 ft)	(500 ft)	(500 ft)	(300 ft)	(300 ft)	(200 ft)	(200 ft)	(300 ft)	
1000 m	m 09	30 m	400 m	100 m	150 m	150 m	100 m	100 m	m 09	m 09	100 m	
(4.0 mi)	(0.1 mi)	(0.1 mi)	(1.7 mi)	(0.1 mi)	(0.4 mi)	(0.1 mi)	(0.4 mi)	(0.2 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	
6.4 km	0.2 km	0.1 km	2.7 km	0.1 km	0.6 km	0.1 km	0.6 km	0.4 km	0.2 km	0.1 km	0.1 km	
(1.2 mi)	(0.1 mi)	(0.1 mi)	(0.5 mi)	(0.1 mi)	(0.1 mi)	0.1 km (0.1 mi)	(0.1 mi)	(0.2 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	
1.8 km	0.2 km	0.1 km	0.8 km	0.1 km	0.2 km	0.1 km	0.1 km	0.2 km	0.2 km	0.1 km	0.1 km	
(1000 ft)	(100 ft)	(100 ft)	(300 ft)	(100 ft)	(200 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	
300 m	30 m	30 m	100 m	30 m	ш 09	30 m	30 m	30 m	30 m	30 m	30 m	
Cyanogen chloride, stabilized	Dimethyl sulfate Dimethyl sulphate	Ethylene dibromide	Compressed gas and hexaethyl tetraphosphate mixture Hexaethyl tetraphosphate and compressed gas mixture	Hydrocyanic acid, aqueous solution, with not more than 20% Hydrogen cyanide Hydrogen cyanide, aqueous solution, with not more than 20% Hydrogen cyanide	Hydrogen cyanide, stabilized (absorbed)	Ethylene dibromide and Methyl bromide mixture, liquid Methyl bromide and Ethylene dibromide mixture, liquid	Nitric oxide Nitric oxide, compressed	Perchloromethyl mercaptan	Phenylcarbylamine chloride	Potassium cyanide, solid (when spilled in water)	Sodium cyanide, solid (when spilled in water)	
125	156 156	154	123	154	152	151	124 124	157	151	157	157	
1589	1595 1595	1605	1612	1613	1614	1647	1660 1660	1670	1672	1680	1689	

			(From a	S small pack	SMALL SPILLS kage or small leak fre	SPILLS all leak fro	om a large	SMALL SPILLS (From a small package or small leak from a large package)	(Fro	m a large p	LARGE SPILLS (From a large package or from many small packages)	LARGE SPILLS ckage or from many s	small packa	(sebt)
			Fi	First ISOLATE in all Directions	be L	Then PROTECT persons Downwind during	Then PROTECT Is Downwind du	ring	1 OSI	First ISOLATE in all Directions	8	Then PROTECT persons Downwind during	ECT Wind durin	<u></u>
<u>۔</u> 29	Guide	Guide NAME OF MATERIAL	Meters	(Feet)	D/ Kilomete	DAY Kilometers (Miles)		NIGHT Kilometers (Miles)	Meters	(Feet)	D Kilomete	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	NIGHT eters (Miles)
1695	131	Chloroacetone, stabilized	30 m	(100 ft)	0.1 km	(0.1 mi)	0.2 km	(0.1 mi)	m 09	(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 1722	155 155	Allyl chlorocarbonate Allyl chloroformate	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)
1724	155	Allytrichlorosilane, stabilized (when spilled in water)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	ш 09	(200 ft)	0.5 km	(0.3 mi)	1.7 km	(1.1 mi)
1725	137	Aluminum bromide, anhydrous (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)
1726	137	Aluminum chloride, anhydrous (when spilled in water)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.2 km	(0.1 mi)	ш 09	(200 ft)	0.5 km	(0.3 mi)	2.0 km	(1.2 mi)
1728	155	Amyltrichlorosilane (when spilled in water)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	m 09	(200 ft)	0.5 km	(0.3 mi)	1.7 km	(1.0 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)	1.1 km	(0.7 mi)	3.9 km	(2.4 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)	0.6 km	(0.4 mi)	1.4 km	(0.9 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)

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1744 1744 1744	154 154 154	Bromine Bromine, solution Bromine, solution (Inhalation Hazard Zone A)	60 m	(200 ft)	0.8 km	(0.5 mi)	2.3 km (1.5 mi)	(1.5 mi)	300 m	(1000 ft)	3.8 km	(2.4 mi)	7.5 km	(4.7 mi)
1744	154	Bromine, solution (Inhalation Hazard Zone B)	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)
1745	144	Bromine pentafluoride (when spilled on land)	100 m	(300 ft)	0.9 km	(0.5 mi)	2.5 km	(1.6 mi)	400 m	(1250 ft)	5.4 km	(3.3 mi)	10.7 km	(6.6 mi)
1745	144	Bromine pentafluoride (when spilled in water)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.3 km	(0.2 mi)	150 m	(500 ft)	1.2 km	(0.7 mi)	4.0 km	(2.5 mi)
1746	144	Bromine trifluoride (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)	0.4 km	(0.3 mi)
1746	144	Bromine trifluoride (when spilled in water)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.3 km	(0.2 mi)	100 m	(300 ft)	1.0 km	(0.7 mi)	3.7 km	(2.3 mi)
1747	155	Butyltrichlorosilane (when spilled in water)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	ш 09	(200 ft)	0.5 km	(0.3 mi)	1.6 km	(1.0 mi)
1749	124	Chlorine trifluoride	60 m	(200 ft)	0.3 km	(0.2 mi)	1.1 km	(0.7 mi)	200 m	(600 ft)	1.4 km	(0.9 mi)	3.6 km	(2.3 mi)
1752	156	Chloroacetyl chloride (when spilled on land)	30 m	(100 ft)	0.3 km	(0.2 mi)	0.6 km	(0.4 mi)	100 m	(300 ft)	1.1 km	(0.7 mi)	1.9 km	(1.2 mi)
1752	156	Chloroacetyl chloride (when spilled in water)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	ш 0£	(100 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)
1753	156	Chlorophenyltrichlorosilane (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	(0.2 mi)	0.8 km	(0.5 mi)
1754	137	Chlorosulfonic acid (with or without sulfur 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)
		"+" means distance can be larger in certain atmospheric conditions	larger i	n certain	atmosp	heric co	nditions				Ľ	TABLE 1		

			SMALL SPILLS (From a small package or small leak from a large package)	S nall pack	SMALL SPILLS kage or small leak fr	SPILLS all leak fro	om a large	package)	(Fro	m a large p	LARGE SPILLS (From a large package or from many small packages)	LARGE SPILLS ckage or from many s	mall packa	(səbt
			First ISOLATE in all Directions	t TE	be	TF PRO 'Sons Dow	Then PROTECT persons Downwind during	ring	д (SO)	First ISOLATE in all Directions	ed	Then PROTECT persons Downwind during	ECT	<u>0</u>
<u>°</u> 9	Guide	NAME OF MATERIAL	Meters (Feet)	Feet)	DAY Kilometers	DAY Kilometers (Miles)		NIGHT Kilometers (Miles)	Meters	Meters (Feet)	Kilomet	DAY Kilometers (Miles)	NIC Kilomete	NIGHT Kilometers (Miles)
1754	137	Chlorosulfonic acid (with or without sulfur trioxide) (when spilled in water)	30 ш 08	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	m 09	(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 km	(0.1 mi)	e0 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)) w 08	(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)	.) m 0£	(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 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)

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(1.5 mi)	2.4 km	(0.4 mi)	0.7 km	(200 ft)	ш 09	(0.1 mi)	0.1 km	(0.1 mi)	0.1 km	(100 ft)	30 m	Phosphorus trichloride (when spilled in water)	137	
(1.3 mi)	2.1 km	(0.7 mi)	1.0 km	(300 ft)	100 m	(0.4 mi)	0.6 km	(0.2 mi)	0.2 km	(100 ft)	30 m	Phosphorus trichloride (when spilled on land)	137	
(0.9 mi)	1.5 km	(0.3 mi)	0.4 km	(100 ft)	30 m	(0.1 mi)	0.1 km	(0.1 mi)	0.1 km	(100 ft)	30 m	Phosphorus tribromide (when spilled in water)	137	
(0.8 mi)	1.3 km	(0.2 mi)	0.3 km	(100 ft)	30 m	(0.1 mi)	0.1 km	(0.1 mi)	0.1 km	(100 ft)	30 m	Phosphorus pentachloride (when spilled in water)	137	
 (0.8 mi)	1.3 km	(0.2 mi)	0.4 km	(100 ft)	30 m	(0.1 mi)	0.1 km	(0.1 mi)	0.1 km	(100 ft)	30 m	Phenyltrichlorosilane (when spilled in water)	156	
 (im 6.0)	1.4 km	(0.3 mi)	0.4 km	(100 ft)	30 m	(0.1 mi)	0.1 km	(0.1 mi)	0.1 km	(100 ft)	30 m	Octyltrichlorosilane (when spilled in water)	156	
 (0.8 mi)	1.3 km	(0.3 mi)	0.4 km	(100 ft)	30 m	(0.1 mi)	0.1 km	(0.1 mi)	0.1 km	(100 ft)	30 m	Octadecyltrichlorosilane (when spilled in water)	156	
(im 6.0)	1.4 km	(0.3 mi)	0.4 km	(100 ft)	30 m	(0.1 mi)	0.1 km	(0.1 mi)	0.1 km	(100 ft)	30 m	Nonyltrichlorosilane (when spilled in water)	156	
(0.8 mi)	1.3 km	(0.2 mi)	0.4 km	(100 ft)	30 m	(0.1 mi)	0.1 km	(0.1 mi)	0.1 km	(100 ft)	30 m	Hexyltrichlorosilane (when spilled in water)	156	
(0.3 mi)	0.4 km	(0.1 mi)	0.1 km	(100 ft)	30 m	(0.1 mi)	0.1 km	(0.1 mi)	0.1 km	(100 ft)	30 m	Hexadecyltrichlorosilane (when spilled in water)	156	
(0.3 mi)	0.5 km	(0.1 mi)	0.2 km	(100 ft)	30 m	(0.1 mi)	0.1 km	(0.1 mi)	0.1 km	(100 ft)	30 m	Fluorosulfonic acid (when spilled in water) Fluorosulphonic acid (when spilled in water)	137	
 (0.8 mi)	1.2 km	(0.3 mi)	0.4 km	(100 ft)	30 m	(0.1 mi)	0.1 km	(0.1 mi)	0.1 km	(100 ft)	30 m	Dodecyltrichlorosilane (when spilled in water)	156	
 (0.7 mi)	1.1 km	(0.2 mi)	0.3 km	(100 ft)	30 m	(0.1 mi)	0.1 km	(0.1 mi)	0.1 km	(100 ft)	30 m	Diphenyldichlorosilane (when spilled in water)	156	

			SMALL SPILLS (From a small package or small leak from a large package)	all pack	SMALL SPILLS skage or small leak fr	SPILLS all leak fro	m a large	package)	(Fro	m a large p	LARGE SPILLS (From a large package or from many small packages)	LARGE SPILLS Ickage or from many s	mall packa	(ses)
			First ISOLATE in all Directions	TE dions	ned	Then PROTECT persons Downwind during	en FECT nwind dur	ing	1 SO	First ISOLATE in all Directions	8.	Then PROTECT persons Downwind during	ECT Wind durin	<u></u>
<u>8</u> ©	Guide	NAME OF MATERIAL	Meters ((Feet)	DAY Kilometers (Miles)	Y s (Miles)	NIGHT Kilometers (Miles)	i HT 's (Miles)	Meters	Meters (Feet)	D Kilomete	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	NIGHT eters (Miles)
1810	137	Phosphorus oxychloride (when spilled on land)	30 m (1	(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 (1	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	m 09	(200 ft)	0.6 km	(0.4 mi)	2.1 km	(1.3 mi)
1815	132	Propionyl chloride (when spilled in water)	30 m (1	(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 (1	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	e0 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 (1	(100 ft)	0.1 km	(0.1 mi)	0.2 km	(0.1 mi)	m 09	(200 ft)	0.8 km	(0.5 mi)	2.7 km	(1.7 mi)
1828	137	Sulfur chlorides (when spilled on land)	30 m (1	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	m 09	(200 ft)	0.3 km	(0.2 mi)	0.4 km	(0.3 mi)
1828	137	Sulfur chlorides (when spilled in water)	30 m (1	(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 (1	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	m 09	(200 ft)	0.3 km	(0.2 mi)	0.4 km	(0.3 mi)
1828	137	Sulphur chlorides (when spilled in water)	30 m (1	(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 1829	137 137	Sulfur trioxide, stabilized Sulphur trioxide, stabilized	g) m 09	(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	137 137	Sulfuric acid, fuming Sulphuric acid, fuming	z) ш 09	(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)

1834	137	Sulfuryl chloride (when spilled on land)	30 m	(100 ft)	0.2 km	(0.1 mi)	0.4 km	(0.3 mi)	e0 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)	m 09	(200 ft)	0.8 km	(0.5 mi)	1.5 km	(im 6:0)
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)	ш 09	(200 ft)	0.5 km	(0.3 mi)	1.7 km	(1.0 mi)
1859 1859	125 125	Silicon tetrafluoride 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 1911	119 119 119	Diborane Diborane, compressed Diborane mixtures	e0 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)
		"+" means distance can be larger in certain atmospheric conditions	larger	in certair	n atmos	oheric co	nditions				_	TABLE 1		

			(From a	small pack	SMALL SPILLS kage or small leak fro	SMALL SPILLS From a small package or small leak from a large package)	ım a large	package)	(Fro	n a large p	LARGE ackage or f	LARGE SPILLS (From a large package or from many small packages)	mall packa	ges)
			FI ISOL	First ISOLATE in all Directions	ed.	Then PROTECT persons Downwind during	Then PROTECT Is Downwind dur	ing	ISO I	First ISOLATE in all Directions	8.	Then PROTECT persons Downwind during	ECT	5
<u>.</u> 98	Guide	Guide NAME OF MATERIAL	Meters	Meters (Feet)	DAY Kilometers	Milometers (Miles) Kilometers (Miles)	NIGHT Kilometers (i HT 's (Miles)	Meters	Meters (Feet)	D Kilomete	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	HT 's (Miles)
1923	135	Calcium dithionite												
1923	135	(when spilled in water) Calcium hydrosulfite (when spilled in water)	30 m	(100 ft)	0.1 km	0.1 km (0.1 mi) 0.4 km	0.4 km	(0.3 mi)	m 09	(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												
1929	135	Potassium hydrosulfite	30 m	(100 ft)	0.1 km	0.1 km (0.1 mi) 0.4 km	0.4 km	(0.2 mi)	m 09	(200 ft)	0.6 km	(0.4 mi)	2.3 km	(1.5 mi)
1929	135	(when spilled in water) Potassium hydrosulphite (when spilled in water)												
1931	171	Zinc dithionite												
1931	171	(when spilled in water) Zinc hydrosulfite	30 m	(100 ft)	0.1 km	0.1 km (0.1 mi) 0.4 km (0.3 mi)	0.4 km	(0.3 mi)	m 09	(200 ft)	0.6 km	(0.4 mi)	2.4 km	(1.5 mi)
1931	171	(when spilled in water) Zinc hydrosulphite (when spilled in water)												
1953	119	Compressed gas, poisonous, flammable nos												
1953	119	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	150 m	(500 ft)	1.0 km	1.0 km (0.6 mi)	3.8 km	(2.4 mi)	1000 m	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 km (0.1 mi) 0.4 km	0.4 km	(0.2 mi)	300 m	(1000 ft)	1.3 km	(0.8 mi)	3.4 km	(2.1 mi)

2.9 km (1.8 mi) 2.0 km (1.3 mi) 10.1 km (6.3 mi) 2.9 km (1.8 mi) 10.1 km (6.3 mi) 2.9 km (1.8 mi) 2.9 km (1.8 mi)	
2.9 km 10.1 km 10.1 km 2.9 km 2.9 km 2.9 km 2.9 km 2.9 km 2.9 km	
(0.6 mi)	TABLE 1
1.0 km 0.8 km 0.8 km 0.8 km 25.7 km 2.3 km 1.0 km	-
(500 ft) (500 ft) (3000 ft) (500 ft) (1250 ft) (500 ft)	
150 m	
0.3 km (0.2 mi) 150 m (500 ft) 0.2 km (0.1 mi) 150 m (500 ft) 3.8 km (2.4 mi) 1000 m (3000 ft) 0.3 km (0.2 mi) 150 m (500 ft) 0.2 km (0.1 mi) 150 m (500 ft) 2.5 km (1.6 mi) 1000 m (3000 ft) 0.9 km (0.6 mi) 150 m (500 ft)	
0.3 km 0.	nditions
0.1 km (0.1 mi) 0.1 km (0.1 mi) 0.1 km (0.1 mi) 0.1 km (0.1 mi) 0.5 km (0.3 mi) 0.1 km (0.1 mi) 0.1 km (0.1 mi)	heric co
0.1 km (0.1 mi) 0.1 km (0.1 mi) 0.1 km (0.1 mi) 0.1 km (0.1 mi) 0.5 km (0.1 mi) 0.2 km (0.1 mi) 0.1 km (0.1 mi)	atmosp
30 m (100 ft) 30 m (100 ft)	n certain
30 m	larger i
Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C) Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D) Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A) Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B) Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B) Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C) Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D) Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone A) Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	(Inhalation Hazard Zone C) "+" means distance can be larger in certain atmospheric conditions
119 119 <th></th>	
1953 1953 1953 1955 1955 1955 1955 1955	

		J	(From a s	small pack	MALL age or sn	SMALL SPILLS From a small package or small leak from a large package)	ım a large	package)	(Froi	n a large p	LARGE ackage or 1	LARGE SPILLS (From a large package or from many small packages)	mall packa	(seb
			Fil ISOL	First ISOLATE in all Directions	ed	Then PROTECT persons Downwind during	Then PROTECT as Downwind dui	ing	7 OS O e ui	First ISOLATE in all Directions	ЭС	Then PROTECT persons Downwind during	en ECT wind durin	D
№	Guide	Guide NAME OF MATERIAL	Meters	Meters (Feet)	D Kilomete	DAY NIGHT Kilometers (Miles) Kilometers (Miles)	NIGHT Kilometers (I	sHT rs (Miles)	Meters	Meters (Feet)	Kilomete	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	NIGHT leters (Miles)
1955	123	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.1 km	0.1 km (0.1 mj) 0.2 km (0.1 mj)	0.2 km	(0.1 mi)	150 m	(500 ft)	0.8 km	(0.5 mi)	2.0 km (1.3 mi)	(1.3 mi)
1955 1955	123	Compressed gas, toxic, n.o.s. Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone A)	100 m	(300 ft)	0.5 km	(0.3 mi)	2.5 km	(1.6 mi)	1000 m	(3000 ft)	5.7 km	(3.6 mi)	10.1 km	(6.3 mi)
1955	123	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone B)	30 m	(100 ft)	0.2 km	(0.1 mi)	0.9 km	(0.6 mi)	400 m	(1250 ft)	2.3 km	(1.4 mi)	5.1 km	(3.2 mi)
1955	123	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone C)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.3 km	(0.2 mi)	150 m	(500 ft)	1.0 km	(0.6 mi)	2.9 km	(1.8 mi)
1955	123	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.2 km	(0.1 mi)	150 m	(500 ft)	0.8 km	(0.5 mi)	2.0 km	(1.3 mi)
1955 1955 1955	123 123 123	Organic phosphate compound mixed with compressed gas Organic phosphate mixed with compressed gas Organic phosphorus compound mixed with compressed gas	100 m	100 m (300 ft)		1.0 km (0.7 mi) 3.4 km (2.1 mi)	3.4 km	(2.1 mi)	500 m	500 m (1500 ft)	4.4 km	(2.7 mi)	9.6 km	(6.0 mi)
1967 1967 1967	123 123 123	Insecticide gas, poisonous, n.o.s. Insecticide gas, toxic, n.o.s. Parathion and compressed gas mixture	100 m	(300 ft)	1.0 km	1.0 km (0.7 mi)	3.4 km	3.4 km (2.1 mi)	500 m	500 m (1500 ft)	4.4 km	(2.7 mi)	9.6 km	(6.0 mi)

	:	Ē		mi)	(Ē	liji	liji	ie (iii	mi)		mi)	mi)	Ê	liji	mi)	mj)	ľ
		(1.4 mi)		(4.7 mi)	(1.4 mi)	(3.4 mi)	(2.2 mi)	(2.2 mi)	(0.3 mi)		(6.3 mi)	(2.1	(7.0+ mi)	(3.3 mi)	(4.7 mi)	(4.9	
	į	2.2 km		7.5 km	2.2 km	5.4 km	3.6 km	3.4 km	0.5 km		10.1 km	3.4 km	11.0+ km	5.3 km	7.5 km	7.9 km	
		(0.4 mi)		(3.0 mi)	(0.4 mi)	(1.1 mi)	(0.7 mi)	(0.7 mi)	(0.2 mi)	Refer to table 3	(3.6 mi)	(0.8 mi)	(7.0+ mi)	(1.4 mi)	(2.1 mi)	(2.2 mi)	
	į	0.6 km		4.8 km	0.6 km	1.7 km	1.1 km	1.1 km	0.3 km	Refer t	5.7 km	1.3 km	11.0+ km	2.2 km	3.3 km	3.5 km	_
		(300 ft)		(1250 ft)	(200 ft)	(1500 ft)	(1000 ft)	(1000 ft)	(500 ft)		(3000 ft)	(1000 ft)	(3000 ft)	(1250 ft)	(1500 ft)	(2000 ft)	
		100 m		400 m	m 09	500 m	300 m	300 m	150 m		1000 m	300 m	1000 m	400 m	500 m	m 009	
		(0.4 mi)		(1.2 mi)	(0.2 mi)	(0.4 mi)	(0.2 mi)	(0.2 mi)	(0.1 mi)	(0.2 mi)	(2.4 mi)	(0.2 mi)	(4.4 mi)	(0.3 mi)	(2.1 mi)	(2.2 mi)	
		0.6 km		2.0 km	0.3 km	0.6 km	0.3 km	0.3 km	0.1 km	0.3 km	3.8 km	0.4 km	7.1 km	0.5 km	3.3 km	3.5 km	nditions
		0.1 km (0.1 mi) 0.6 km		(0.6 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.6 mi)	(0.1 mi)	(1.1 mi)	(0.1 mi)	(0.5 mi)	(0.7 mi)	heric
				0.9 km	0.1 km	0.1 km	0.1 km	0.1 km	0.1 km	0.1 km	1.0 km	0.1 km	1.8 km	0.1 km	0.9 km	1.1 km	atmoer
		(100 ft)		(300 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(500 ft)	(100 ft)	(1000 ft)	(100 ft)	(500 ft)	(e00 ft)	in certair
	;	30 m		100 m	30 m	30 m	30 m	30 m	30 m	30 m	150 m	30 m	300 m	30 m	150 m	200 m	arger
Dinitrogen tetroxide and Nitric oxide mixture	Nitric oxide and Dinitrogen tetroxide mixture	Nitric oxide and Nitrogen	Nitrogen dioxide and Nitric oxide mixture	Iron pentacarbonyl	Magnesium diamide (when spilled in water)	Magnesium phosphide (when spilled in water)	Potassium phosphide (when spilled in water)	Strontium phosphide (when spilled in water)	Nitric acid, red fuming	Hydrogen chloride, refrigerated liquid	Arsine	Dichlorosilane	Oxygen difluoride Oxygen difluoride, compressed	Sulfuryl fluoride Sulphuryl fluoride	Germane	Selenium hexafluoride	"+" means distance can be larger in certain atmospheric conditions
124	124	124	124	136	135	139	139	139	157	125	119	119	124 124	123 123	119	125	
1975	1975	1975	1975	1994	2004	2011	2012	2013	2032	2186	2188	2189	2190 2190	2191 2191	2192	2194	

+" means distance can be larger in certain atmospheric conditions

(se		Ŀ	(Miles)	7.0+ mi)	(1.7 mi)	(1.8 mi)	(2.2 mi)	(2.3 mi)	(7.0+ mi)	(2.4 mi)	(0.7 mi)	(0.4 mi)	(1.8 mi)	(1.6 mi)	(0.2 mi)	(0.5 mi)	
LARGE SPILLS (From a large package or from many small packages)	Then PROTECT Dersons Downwind during	HUN	Kilometers (Miles)	11.0+ km (7.0+ mi)	2.7 km	2.9 km	3.5 km	3.7 km	11.0+ km	3.8 km	1.1 km	0.6 km	2.9 km	2.5 km	0.4 km	0.7 km	
LARGE SPILLS ckage or from many s	Then PROTECT Properties The PROTECT Properties The	DAV	Kilometers (Miles)	11.0+ km (7.0+ mi)	(0.5 mi)	(0.6 mi)	(0.6 mi)	(0.8 mi)	(6.7 mi)	(1.0 mi)	(0.4 mi)	(0.3 mi)	(0.6 mi)	(0.9 mi)	(0.2 mi)	(0.2 mi)	
LARGE ackage or	8		Kilomet	11.0+ km	0.8 km	1.0 km	1.0 km	1.3 km	10.7 km	1.6 km	0.6 km	0.4 km	1.0 km	1.4 km	0.3 km	0.3 km	l
m a large p	First ISOLATE	210102	(Feet)	(3000 ft)	(200 ft)	(200 ft)	(500 ft)	(1000 ft)	(3000 ft)	(1000 ft)	(200 ft)	(100 ft)	(1000 ft)	(500 ft)	(100 ft)	(100 ft)	
	NSO ::	<u> </u>	Meters	1000 m	150 m	150 m	150 m	300 m	1000 m	300 m	m 09	30 m	300 m	150 m	30 m	30 m	1
SMALL SPILLS From a small package or small leak from a large package)	rina	THUN	Kilometers (Miles)	10.9 km (6.8 mi)	(0.5 mi)	(0.2 mi)	(0.7 mi)	(0.7 mi)	(3.7 mi)	(0.2 mi)	(0.2 mi)	(0.1 mi)	(0.2 mi)	(0.4 mi)	(0.1 mi)	(0.1 mi)	
om a large	Then PROTECT Is Downwind du	N	_		0.8 km	0.3 km	1.0 km	1.1 km	6.0 km	0.3 km	0.3 km	0.2 km	0.3 km	0.5 km	0.1 km	0.1 km	
SPILLS nall leak fro	Then PROTECT Dersons Downwind during	ΛΔΩ	Kilometers (Miles)	(3.6 mi)	(0.1 mi)	(0.1 mi)	(0.2 mi)	(0.2 mi)	(1.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	l
SMALL SPILLS kage or small leak fr	ed L		Kilomete	5.8 km	0.2 km	0.1 km	0.2 km	0.3 km	1.7 km	0.1 km	0.2 km	0.1 km	0.1 km	0.2 km	0.1 km	0.1 km	
small pack	First ISOLATE	2000	(Feet)	1000 m (3000 ft)	(100 ft)	(100 ft)	(100 ft)	(200 ft)	(1000 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	l
(From a	180!	<u> </u>	Meters	1000 m	30 m	30 m	30 m	m 09	300 m	30 m	30 m	30 m	30 m	30 m	30 m	30 m	
			Guide NAME OF MATERIAL	Tellurium hexafluoride	Tungsten hexafluoride	Hydrogen iodide, anhydrous	Phosphorus pentafluoride Phosphorus pentafluoride, compressed	Phosphine	Hydrogen selenide, anhydrous	Carbonyl sulfide Carbonyl sulphide	Chloroacetaldehyde 2-Chloroethanal	Isocyanatobenzotrifluorides	Nitrosylsulfuric acid, liquid (when spilled in water) Nitrosylsulphuric acid, liquid (when spilled in water)	Allylamine	Phenyl mercaptan	Butyryl chloride (when spilled in water)	
			Guide	125	125	125	125 125	119	117	119 119	153 153	156	157	131	131	132	1
		₽	9	2195	2196	2197	2198	2199	2202	2204 2204	2232 2232	2285	2308	2334	2337	2353	

(je	(Ē	je (je	(Ē	<u>i</u>	mi)	je (je	(Ē	(Ē	(Ē	ie (ie	(F)	<u>=</u>	<u>=</u>	
(0.8 mi)	(0.3 mi)	(0.6 mi)	(4.9 mi)	(3.7 mi)	(7.0+ mi)	(2.6 mi)	(0.3 mi)	(0.6 mi)	(0.8 mi)	(2.1 mi)	(0.7 mi)	(2.5 mi)	(0.3 mi)	
1.3 km	0.4 km	0.9 km	7.8 km	6.0 km	11.0+ km	4.2 km	0.4 km	0.9 km	1.2 km	3.3 km	1.1 km	4.0 km	0.4 km	
(0.5 mi)	(0.1 mi)	(0.3 mi)	(2.3 mi)	(1.3 mi)	(7.0+ mi)	(0.8 mi)	(0.1 mi)	(0.2 mi)	(0.2 mi)	(1.3 mi)	(0.4 mi)	(1.3 mi)	(0.2 mi)	TABLE 1
0.7 km	0.2 km	0.5 km	3.6 km	2.1 km	11.0+ km	1.2 km	0.1 km	0.3 km	0.4 km	2.1 km	0.7 km	2.1 km	0.3 km	_
(200 ft)	(100 ft)	(200 ft)	(2000 ft)	(1250 ft)	(3000 ft)	(t) (009)	(100 ft)	(100 ft)	(100 ft)	(600 ft)	(200 ft)	(600 ft)	(100 ft)	
m 09	30 m	m 09	m 009	400 m	1000 m	200 m	30 m	30 m	30 m	200 m	m 09	200 m	30 m	
(0.2 mi)	(0.1 mi)	(0.2 mi)	(1.6 mi)	(1.5 mi)	(1.7 mi)	(0.7 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.6 mi)	(0.2 mi)	(1.1 mi)	(0.1 mi)	
0.3 km	0.1 km	0.2 km	2.5 km	2.3 km	2.7 km	1.2 km	0.1 km	0.1 km	0.1 km	1.0 km	0.3 km	1.7 km	0.1 km	nditions
(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.5 mi)	(0.3 mi)	(0.4 mi)	(0.2 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.3 mi)	(0.1 mi)	(0.4 mi)	(0.1 mi)	heric co
0.2 km	0.1 km	0.1 km	0.7 km	0.5 km	0.7 km	0.3 km	0.1 km	0.1 km	0.1 km	0.5 km	0.2 km	0.6 km	0.1 km	atmosp
(100 ft)	(100 ft)	(100 ft)	(500 ft)	(300 ft)	(300 ft)	(200 ft)	(100 ft)	(100 ft)	(100 ft)	(200 ft)	(100 ft)	(200 ft)	(100 ft)	n certair
30 m	30 m	30 m	150 m	100 m	100 m	m 09	30 m	30 m	30 m	ш 09	30 m	m 09	30 m	largeri
Dimethylhydrazine, symmetrical	Isobutyryl chloride (when spilled in water)	Isopropyl chloroformate	Carbonyl fluoride Carbonyl fluoride, compressed	Sulfur tetrafluoride Sulphur tetrafluoride	Hexafluoroacetone	Nitrogen trioxide	Dibenzyldichlorosilane (when spilled in water)	Ethylphenyldichlorosilane (when spilled in water)	Methylphenyldichlorosilane (when spilled in water)	Trimethylacetyl chloride	Trichloroacetyl chloride	Thiophosgene	Methyl isothiocyanate	"+" means distance can be larger in certain atmospheric conditions
131	132	155	125 125	125 125	125	124	156	156	156	131	156	157	131	
2382	2395	2407	2417 2417	2418 2418	2420	2421	2434	2435	2437	2438	2442	2474	2477	

			(From a s	SMALL SPILLS From a small package or small leak from a large package)	MALL (age or sm	SMALL SPILLS kage or small leak fro	om a large	package)	(Fro	m a large p	LARGE SPILLS (From a large package or from many small packages)	LARGE SPILLS ckage or from many s	mall packa	ges)
			First ISOLATE in all Directions	st ATE	De d	TF PRO rsons Dow	Then PROTECT persons Downwind during	ing	ISO	First ISOLATE in all Directions	<u>e</u>	Then PROTECT persons Downwind during	ECT	D
<u>0</u> %	Guide	Guide NAME OF MATERIAL	Meters (Feet)	(Feet)	D/ Kilometer	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	NIGHT eters (Miles)	Meters	Meters (Feet)	D Kilomete	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	HT 's (Miles)
2478	155	Isocyanate solution, flammable,												
2478	155	poisonous, n.o.s. Isocyanate solution, flammable,												
2478	155	loxic, n.o.s. Isocyanates, flammable,	m 09	(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	lsocyanates, 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	1000 m (3000 ft)	11.0+ km	(7.0+ mi)	11.0+ km (7.0+ mi)	(7.0+ mi)
2481	155	Ethyl isocyanate	150 m	(200 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)	m 009	(2000 ft)	7.4 km	(4.6 mi)	10.8 km	(6.7 mi)
2483	155P	Isopropyl isocyanate	150 m	(200 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	e0 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	m 09	(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	e0 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	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	lodine 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)	m 09	(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)	m 008	(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)	m 09	(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)	ш 09	(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	m 09	(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)	m 09	(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)	ш 09	(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	155 155	Chloroformates, poisonous, corrosive, flammable, n.o.s. Chloroformates, toxic, corrosive, flammable, n.o.s.	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.2 mi)	m 09	(200 ft)	0.5 km	(0.3 mi)	0.7 km	(0.5 mi)
2742	155	Isobutyl 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)	0.5 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)	ш 09	(200 ft)	0.5 km	(0.3 mi)	1.9 km	(1.2 mi)
2826	155	Ethyl chlorothioformate	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.2 mi)	e0 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	larder	n certain	atmosr	pheric co	nditions			_	٦	T A D I G 4		Γ

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

	Guide NAME OF MATERIAL 135 Methyl phosphonous dichloride 124 Bromine chloride	(From a small par First ISOLATE in all Directions Meters (Feet) 30 m (100 ft)	In a small packs First ISOLATE all Directions eters (Feet) Im (100 ft)	mage or sm pe pkilometer 0.4 km 0.5 km	SMALL SPILLS	SPILLS all leak from a large PROTECT rsons Downwind dur v v v v (0.3 mi) 1.1 km	First First PROTECT ISOLATE In all Directions Meters (Feet) Kilometers (Miles) 1.1 km (0.7 mi) 100 m (300 ft) 0.5 km (0.3 mi) 1.8 km (1.1 mi)	(Fror Exolution (From Exolutio	(From a large p First ISOLATE in all Directions Meters (Feet) 00 m (600 ft)	LARGE ackage or f pe pe D Kilomett 2.4 km 5.4 km	First	imall packages) ECT wind during NIGHT Kilometers (Miles) 4.1 km (2.6 mi) 11.0+ km (7.0+ mi)	ges) g ithT is (Miles) (2.6 mi) (7.0+ mi)
Ethyl phosphonothioic dichloride, anhydrous Ethyl phosphorodichloridate Boron trifluoride dimethyl etherate (when spilled in water)	othioic lydrous dichloridate ate in water)	30 m	(100 ft) (100 ft) (100 ft)	0.1 km 0.1 km	(0.1 mi) (0.1 mi)	0.1 km 0.3 km	0.1 km (0.1 mi) 0.1 km (0.1 mi) 0.1 km (0.1 mi) 0.1 km (0.1 mi) 0.1 km (0.1 mi) 0.3 km (0.2 mi)	30 m 30 m 100 m	(100 ft) (100 ft) (300 ft)	0.2 km 0.3 km 1.2 km	(0.1 mi) (0.2 mi) (0.8 mi)	0.2 km 0.3 km 3.6 km	(0.1 mi) (0.2 mi) (2.2 mi)
Radioactive material, Uranium hexafilooride, fissile (when spilled in water) Uranium hexafilooride, radioactive material, fissile (when spilled in water)	erial, In water) In water) Oride, erial, fissile	30 m	(100 ft)	0.1 km	0.1 km (0.1 mi) 0.2 km (0.1 mi)	0.2 km	(0.1 mi)	m 09	(200 ft)	0.4 km	(0.3 mi)	2.1 km	(1.3 mi)
Radioactive material, Uranium hexafluoride, non fissile or fissile-excepted (when spilled in water) Uranium hexafluoride, radioactive material, non fissile or fissile-excepted (when spilled in water)	rial, noride, non excepted n water) ride, aride, excepted excepted n water)	30 m	(100 ft)	0.1 km	0.1 km (0.1 mi)	0.2 km	(0.1 mi)	ш 09	(200 ft)	0.4 km	(0.3 mi)	2.1 km	(1.3 mi)

(1.0 mi)	(1.0 mi)	(1.0 mi)	(1.0 mi)	(0.5 mi)	(4.1 mi)	(7.0+ mi)	(1.7 mi)	(7.0+ mi)	(6.3 mi)	(2.1 mi)	(1.8 mi)	
1.6 km	1.6 km	1.6 km	1.6 km	0.8 km	6.5 km	11.0+ km	2.7 km	11.0+ km	10.1 km	3.4 km	2.9 km	
(0.3 mi)	(0.3 mi)	(0.3 mi)	(0.3 mi)	(0.4 mi)	(1.3 mi)	(3.3 mi)	(1.0 mi)	(3.4 mi)	(3.6 mi)	(0.8 mi)	(0.6 mi)	L - C < +
0.5 km	0.5 km	0.5 km	0.5 km	0.5 km	2.0 km	5.2 km	1.6 km	5.5 km	5.7 km	1.3 km	1.0 km	۱
(200 ft)	(200 ft)	(200 ft)	(200 ft)	(200 ft)	(1500 ft)	(2500 ft)	(500 ft)	(3000 ft)	1000 m (3000 ft)	(1000 ft)	(500 ft)	
m 09	m 09	ш 09	m 09	m 09	500 m	800 m	150 m	1000 m	1000 m	300 m	150 m	
(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.5 mi)	(0.6 mi)	(0.5 mi)	(0.7 mi)	(2.4 mi)	(0.2 mi)	(0.2 mi)	
0.2 km	0.2 km	0.2 km	0.2 km	0.2 km	0.7 km	0.9 km	0.7 km	1.1 km	3.8 km	0.4 km	0.3 km	nditions
(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.2 mi)	(0.2 mi)	(0.6 mi)	(0.1 mi)	(0.1 mi)	harir co
0.1 km	0.1 km	0.1 km	0.1 km	0.2 km	0.1 km	0.2 km	0.3 km	0.2 km	1.0 km	0.1 km	0.1 km	atmoer
(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	(500 ft)	(100 ft)	(100 ft)	in cortain
30 m	30 m	30 m	30 m	30 m	30 m	30 m	30 m	30 m	150 m	30 m	30 m	Jaron
Chlorosilanes, flammable, corrosive, n.o.s. (when spilled in water)	Chlorosilanes, corrosive, flammable, n.o.s. (when spilled in water)	Chlorosilanes, corrosive, n.o.s. (when spilled in water)	Chlorosilanes, water-reactive, flammable, corrosive, n.o.s. (when spilled in water)	2-Methyl-2-heptanethiol	Aluminum phosphide pesticide (when spilled in water)	Trifluoroacetyl chloride	Methacrylonitrile, stabilized	Perchloryl fluoride	Liquefied gas, poisonous, flammable, n.o.s. Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	"+" magne distance can be larger in certain atmospheric conditions
155	155	156	139	131	157	125	131P	124	119	119	119	
2985	2986	2987	2988	3023	3048	3057	3079	3083	3160	3160	3160	

+" means distance can be larger in certain atmospheric conditions

			(From a sr	S nall pack	SMALL SPILLS kage or small leak fr	SPILLS all leak fro	ım a large	SMALL SPILLS From a small package or small leak from a large package)	(Froi	n a large p	LARGE	LARGE SPILLS (From a large package or from many small packages)	mall packa	(səb)
			First ISOLATE in all Directions	st ATE ections	ed	Then PROTECT persons Downwind during	Then PROTECT IS Downwind dur	ing	7 ISOI IO Ille ni	First ISOLATE in all Directions	ed	Then PROTECT persons Downwind during	en ECT Iwind durin	D
<u>.</u> 9	Guide	Guide NAME OF MATERIAL	Meters (Feet)	(Feet)	DAY Kilometers	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	i HT rs (Miles)	Meters	(Feet)	Kilomete	DAY Kilometers (Miles)	NIC Kilomete	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 km (0.1 mi) 0.2 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. 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	1000 m (3000 ft)	5.7 km	(3.6 ті)	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	0.4 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 3162	123 123	Liquefied gas, poisonous, n.o.s. Liquefied gas, poisonous, n.o.s. 100 m (Inhalation Hazard Zone A)		(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)

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	TABLE 1	_	-			nditions	oheric co	atmosp	in certair	larger	"+" means distance can be larger in certain atmospheric conditions		
											poisorious, liquia, il.o.s. Organophosphorus compound, toxic, liquid, n.o.s.	151	3278
4.1 km (2.6 mi)	(1.5 mi)	2.4 km	(600 ft)	200 m	(0.7 mi)	1.1 km	(0.3 mi)	0.4 km	(100 ft)	30 m	Organophosphorus compound, liquid, toxic, n.o.s. Organophosphorus compound, possonals liquid n.o.s.	151	3278
											Organophosphorus compound, liquid, poisonous, n.o.s.	151	3278
2.7 km (1.7 mi)	(1.0 mi)	1.6 km	(500 ft)	150 m	(0.5 mi)	0.7 km	(0.2 mi)	0.3 km	(100 ft)	30 m	Nitriles, indut, poisonous, n.c.s. Nitriles, liquid, toxic, n.o.s. Nitriles, poisonous, liquid, n.o.s. Nitriles, toxic, liquid, n.o.s.	5 5 5	3276 3276 3276 3276
2.7 km (1.7 mi)	(1.0 mi)	1.6 km	(500 ft)	150 m	(0.5 mi)	0.7 km	(0.2 mi)	0.3 km	(100 ft)	30 m	Nitriles, toxic, flammable, n.o.s.	131	3275
											Nitriles, poisonous,	131	3275
0.9 km (0.6 mi)	(0.4 mi)	0.7 km	(200 ft)	m 09	(0.2 mi)	0.3 km	(0.2 mi)	0.2 km	(100 ft)	30 m	Methanesulfonyl chloride Methanesulphonyl chloride	156 156	3246 3246
2.0 km (1.3 mi)	(0.5 mi)	0.8 km	(500 ft)	150 m	(0.1 mi)	0.2 km	(0.1 mi)	0.1 km	(100 ft)	30 m	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)	123	3162
2.9 km (1.8 mi)	(0.6 mi)	1.0 km	(500 ft)	150 m	(0.2 mi)	0.3 km	(0.1 mi)	0.1 km	(100 ft)	30 m	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)	123	3162
5.1 km (3.2 mi)	(1.4 mi)	2.3 km	(1250 ft)	400 m	(0.6 mi)	0.9 km	(0.1 mi)	0.2 km	(100 ft)	30 m	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)	123	3162
10.1 km (6.3 mi)	(3.6 mi)	5.7 km	(3000 ft)	1000 m	(1.6 mi)	2.5 km	(0.3 mi)	0.5 km	(300 ft)	100 m	Liquefied gas, toxic, n.o.s. Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)	123 123	3162 3162
2.0 km (1.3 mi)	(0.5 mi)	0.8 km	(500 ft)	150 m	(0.1 mi)	0.2 km	(0.1 mi)	0.1 km	(100 ft)	30 m	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	123	3162

jes)		H T s (Miles)	(2.6 mi)	(2.2 mi)	(7.0+ mi	(1.2 mi)	(1.4 mi)	(7.0+ mi)	(4.2 mi)	
LARGE SPILLS (From a large package or from many small packages)	Then PROTECT persons Downwind during	NIGHT Kilometers (Miles)	4.1 km	3.6 km	11.0+ km (7.0+ mi	1.9 km	2.2 km (1.4 mi)	11.0+ km (7.0+ mi)	6.7 km	
LARGE SPILLS ckage or from many s	Then PROTECT ersons Downwind	DAY Kilometers (Miles)	(1.5 mi)	(1.0 mi)	(6.8 mi)	(0.3 mi)	(0.5 mi)	(3.1 mi)	(1.5 mi)	
LARGE ackage or	ă	I Kilomet	2.4 km	1.6 km	10.8 km	0.5 km	0.8 km	5.0 km	2.5 km	
m a large p	First ISOLATE in all Directions	Meters (Feet)	(600 ft)	(500 ft)	(3000 ft)	(900 ft)	(500 ft)	(2500 ft)	400 m (1250 ft)	
(Fro	д ISO in all D	Meters	200 m	150 m	1000 m	200 m	150 m	800 m	400 m	
SMALL SPILLS (From a small package or small leak from a large package)	ring	NIGHT Kilometers (Miles)	(0.7 mi)	(0.4 mi)	(3.1 mi)	(0.2 mi)	0.1 km (0.1 mi) 0.2 km (0.2 mi)	0.5 km (0.3 mi) 2.5 km (1.6 mi)	0.3 km (0.2 mi) 1.1 km (0.7 mi)	
om a large	Then PROTECT S Downwind du		1.1 km	0.7 km	5.0 km	0.3 km	0.2 km	2.5 km	1.1 km	
SPILLS nall leak fro	Then PROTECT persons Downwind during	DAY Kilometers (Miles)	0.4 km (0.3 mi)	(0.1 mi)	(0.8 mi)	(0.1 mi)	(0.1 mi)	(0.3 mi)	(0.2 mi)	
SMALL SPILLS skage or small leak from	ed.	D / Kilomete		0.2 km	1.3 km	0.1 km				
small pack	First ISOLATE in all Directions	Meters (Feet)	(100 ft)	(100 ft)	(300 ft)	(100 ft)	(100 ft)	100 m (300 ft)	(200 ft)	
(From a		Meters	30 m	30 m	100 m	30 m	30 m	100 m	e0 m	
		Guide NAME OF MATERIAL	Organophosphorus compound, poisonous, flammable, n.o.s. Organophosphorus compound, toxic, flammable, n.o.s.	Organoarsenic compound, liquid, n.o.s.	Metal carbonyls, liquid, n.o.s.	Hydrogen cyanide, solution in alcohol, with not more than 45% Hydrogen cyanide	Carbon dioxide and Ethylene oxide mixture, with more than 87% Ethylene oxide Ethylene oxide and Carbon dioxide mixture, with more than 87% Ethylene oxide	Compressed gas, poisonous, oxidizing, n.o.s. Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	
		Guide	131	151	151	131	119P	124	124	
		<u>-</u> 98	3279	3280	3281	3294	3300	3303	3303	

(1.8 mi)	(1.3 mi)	(7.0+ mi)	(4.2 mi)	(1.8 mi)	(1.3 mi)	(5.7 mi)	(3.2 mi)	(2.0 mi)	
2.9 km	2.0 km	11.0+ km (7.0+ mi)	6.7 km	2.9 km	2.0 km	9.2 km	5.1 km	3.2 km	
(0.6 mi)	(0.5 mi)	(3.1 mi)	(1.5 mi)	(0.6 mi)	(0.5 mi)	(1.8 mi)	(1.4 mi)	(1.0 mi)	TABLE 1
1.0 km	0.8 km	5.0 km	2.5 km	1.0 km	0.8 km	2.9 km	2.3 km	1.6 km	F
(500 ft)	(500 ft)	(2500 ft)	400 m (1250 ft)	(500 ft)	(500 ft)	(1500 ft)	(1250 ft)	(1000 ft)	_
150 m	150 m	800 m		150 m	150 m	500 m	400 m	300 m	
(0.2 mi)	(0.1 mi)	2.5 km (1.6 mi)	(0.2 mi) 1.1 km (0.7 mi)	(0.2 mi)	(0.1 mi)	(1.6 mi)	(0.7 mi)	(0.3 mi)	
0.3 km	0.2 km	2.5 km	1.1 km	0.3 km	0.2 km	2.5 km	1.0 km	0.5 km	nditions
(0.1 mi)	(0.1 mi)	0.5 km (0.3 mi)	(0.2 mi)	(0.1 mi)	(0.1 mi)	(0.3 mi)	(0.2 mi)	(0.1 mi)	heric co
0.1 km	0.1 km	0.5 km	0.3 km	0.1 km	0.1 km	0.5 km	0.2 km	0.1 km	atmosp
(100 ft)	(100 ft)	100 m (300 ft)	(200 ft)	(100 ft)	(100 ft)	(300 ft)	(100 ft)	(100 ft)	n certain
30 m	30 m	100 m	m 09	30 m	30 m	100 m	30 m	30 m	l larger i
Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)	Compressed gas, toxic, oxidizing, n.o.s. Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)	Compressed gas, poisonous, corrosive, n.o.s. Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	"+" means distance can be larger in certain atmospheric conditions
124	124	124	124	124	124	125	125	125	
3303	3303	3303	3303	3303	3303	3304	3304	3304	
								_	

			(From a sr	S mall pack	SMALL SPILLS kage or small leak fr	SPILLS all leak fro	nm a large	SMALL SPILLS From a small package or small leak from a large package)		m a large p	LARGE ackage or f	LARGE SPILLS (From a large package or from many small packages)	mall packa	ges)
			First ISOLATE	ATE	l ed	TP PRO: rsons Dow	Then PROTECT Dersons Downwind during	ina	ISO Olle di	First ISOLATE	90	Then PROTECT Dersons Downwind during	en ECT	
9.0	Guide	Guide NAME OF MATERIAL	Meters (Feet)	(Feet)	D/ Kilometer	DAY Kilometers (Miles)		NIGHT Kilometers (Miles)	Meters	Meters (Feet)	D Kilomete	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	i HT rs (Miles)
3304	125	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km (0.1 mi) 0.2 km (0.1 mi)	(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. 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)	0.1 km (0.1 mi) 0.5 km (0.3 mi)	(0.3 mi)	300 m	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)	0.1 km (0.1 mi) 0.2 km (0.1 mi)	(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. 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)

(3.2 mi)	(2.0 mi)	(1.3 mi)	(5.7 mi)	(3.2 mi)	(2.0 mi)	(1.3 mi)	(5.7 mi)	(3.2 mi)	
5.1 km	3.2 km	2.0 km	9.2 km	5.1 km	3.2 km	2.0 km	9.2 km	5.1 km	
(1.4 mi)	(1.0 mi)	(0.5 mi)	(1.8 mi)	(1.4 mi)	(1.0 mi)	(0.5 mi)	(1.8 mi)	(1.4 mi)	TABLE 1
2.3 km	1.6 km	0.8 km	2.9 km	2.3 km	1.6 km	0.8 km	2.9 km	2.3 km	ľ
(1250 ft)	(1000 ft)	(500 ft)	500 m (1500 ft)	400 m (1250 ft)	(1000 ft)	(500 ft)	(1500 ft)	(1250 ft)	
400 m	300 m	150 m			300 m	150 m	500 m	400 m	
(0.7 mi)	(0.3 mi)	(0.1 mi)	2.5 km (1.6 mi)	(0.2 mi) 1.0 km (0.7 mi)	(0.3 mi)	(0.1 mi)	(1.6 mi)	(0.7 mi)	
1.0 km	0.5 km	0.2 km	2.5 km	1.0 km	0.5 km	0.2 km	2.5 km	(0.2 mi) 1.0 km	nditions
(0.2 mi)	(0.1 mi)	0.1 km (0.1 mi) 0.2 km	0.5 km (0.3 mi)	(0.2 mi)	(0.1 mi)	(0.1 mi)	(0.3 mi)	(0.2 mi)	heric co
0.2 km	0.1 km	0.1 km	0.5 km	0.2 km	0.1 km	0.1 km	0.5 km	0.2 km	atmosp
(100 ft)	(100 ft)	(100 ft)	100 m (300 ft)	(100 ft)	(100 ft)	(100 ft)	(300 ft)	(100 ft)	in certair
30 m	30 m	30 m	100 m	30 m	30 m	30 m	100 m	30 m	larger
Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	Compressed gas, toxic, flammable, corrosive, n.o.s. Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	"+" means distance can be larger in certain atmospheric conditions
119	119	119	119	119	119	119	124	124	
3305	3305	3305	3305	3305	3305	3305	3306	3306	
								Dogo 20	25

			SMALL SPILLS (From a small package or small leak from a large package)	SMA ackage c	SMALL SPILLS kage or small leak fro	LLS eak fron	n a large	oackage)	(Fro	n a large p	LARGE SPILLS (From a large package or from many small packages)	LARGE SPILLS ckage or from many s	mall packa	ges)
			First ISOLATE in all Directions		person	PROTECT PROTECT as Downwind	Then PROTECT persons Downwind during	bu	F ISOI IO Ille ni	First ISOLATE in all Directions	ed.	Then PROTECT persons Downwind during	ECT Wind durin	0
<u>0</u> &	Guide	Guide NAME OF MATERIAL	Meters (Feet)		DAY neters (N	(liles)	DAY NIGHT Kilometers (Miles) Kilometers (Miles)	HT s (Miles)	Meters	Meters (Feet)	D Kilomete	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	i HT 's (Miles)
3306	124	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)		km (0.1	l mi)).5 km	0.1 km (0.1 mi) 0.5 km (0.3 mi)	300 m	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)	30 m (100 ft)	t) 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. Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)		0.5 km (0.3	(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)	30 m (100 ft)		0.2 km (0.2	. (im 2	(0.2 mi) 1.0 km (0.7 mi)	(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)	30 m (100 ft)		km (0.1	l mi)	0.1 km (0.1 mi) 0.5 km (0.3 mi)	(0.3 mi)	300 m	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)	30 m (100 ft)		0.1 km (0.1	(0.1 mi) 0.2 km		(0.1 mi)	150 m	(200 ft)	0.8 km	(0.5 mi)	2.0 km	(1.3 mi)

(7.0+ mi)	(4.2 mi)	(1.8 mi)	(1.3 mi)	(7.0+ mi)	(4.2 mi)	(1.8 mi)	(1.3 mi)	
11.0+ km (7.0+ mi)	6.7 km	2.9 km	2.0 km	11.0+ km (7.0+ mi)	6.7 km	2.9 km	2.0 km	
(3.1 mi)	(1.5 mi)	(0.6 mi)	(0.5 mi)	(3.1 mi)	(1.5 mi)	(0.6 mi)	(0.5 mi)	TABLE 1
5.0 km	2.5 km	1.0 km	0.8 km	5.0 km	2.5 km	1.0 km	0.8 km	-
(2500 ft)	(1250 ft)	(500 ft)	(500 ft)	800 m (2500 ft)	400 m (1250 ft)	(500 ft)	(200 ft)	
800 m	400 m	150 m	150 m	800 m	400 m	150 m	150 m	
(1.6 mi)	(0.7 mi)	(0.2 mi)	(0.1 mi)	2.5 km (1.6 mi)	(0.7 mi)	(0.2 mi)	(0.1 mi)	
2.5 km	1.1 km	0.3 km	0.2 km	2.5 km		0.3 km	0.2 km	nditions
(0.3 mi)	(0.2 mi)	(0.1 mi)	(0.1 mi)	0.5 km (0.3 mi)	0.3 km (0.2 mi) 1.1 km	(0.1 mi)	(0.1 mi)	heric co
0.5 km	0.3 km	0.1 km	0.1 km	0.5 km	0.3 km	0.1 km	0.1 km	atmosp
(300 ft)	(200 ft)	(100 ft)	(100 ft)	100 m (300 ft)	(200 ft)	(100 ft)	(100 ft)	in certair
100 m	m 09	30 m	30 m	100 m	e0 m	30 m	30 m	larger
Liquefied gas, poisonous, oxidizing, n.o.s. Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)	Liquefied gas, toxic, oxidizing, n.o.s. Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)	"+" means distance can be larger in certain atmospheric conditions
124	124	124	124	124	124	124	124	
3307	3307	3307	3307	3307	3307	3307	3307	

			SMALL SPILLS (From a small package or small leak from a large package)	l packa	SMALL SPILLS kage or small leak fr	SPILLS all leak fro	om a large	package)	(Fro	m a large p	LARGE	LARGE SPILLS (From a large package or from many small packages)	mall packa	iges)
			First ISOLATE in all Directions	m Suo	per	TF PRO Sons Dow	Then PROTECT persons Downwind during	ring	д ISO In all E	First ISOLATE in all Directions	8	Then PROTECT persons Downwind during	ECT Wind durin	Ď
<u>0</u> છે	Guide	Guide NAME OF MATERIAL	Meters (Feet)		DAY Kilometers	s (Miles)	Milometers (Miles) Kilometers (Miles)	NIGHT leters (Miles)	Meters	Meters (Feet)	Kilomet	DAY Kilometers (Miles)	NIC Kilomete	NIGHT Kilometers (Miles)
3308	125	Liqueffed gas, poisonous, corrosive, n.o.s. Liqueffed gas, poisonous, corrosive, n.o.s.	100 m (300 ft)	(H)	0.5 km	(0.3 mi)	2.5 km	0.5 km (0.3 mi) 2.5 km (1.6 mi)		500 m (1500 ft)	2.9 km (1.8 mi)	(1.8 mi)	9.2 km	(5.7 mi)
3308	125	(Inhalation Hazard Zone A) Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)	30 m (10	(100 ft)	0.2 km	(0.2 mi)	1.0 km	(0.2 mi) 1.0 km (0.7 mi)	400 m	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 (10	(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 (10	(100 ft)	0.1 km	(0.1 mi)	0.2 km	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. Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)	100 m (30	(300 ft)	0.5 km	(0.3 mi)	2.5 km	0.5 km (0.3 mi) 2.5 km (1.6 mi)	500 m	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 (10	(100 ft)	0.2 km	(0.2 mi) 1.0 km	1.0 km	(0.7 mi)	400 m	(1250 ft)	2.3 km	(1.4 mi)	5.1 km	(3.2 mi)

(2.0 mi)	(1.3 mi)	(5.7 mi)	(3.2 mi)	(2.0 mi)	(1.3 mi)	(5.7 mi)	(3.2 mi)	(2.0 mi)	
3.2 km	2.0 km	9.2 km	5.1 km	3.2 km	2.0 km	9.2 km	5.1 km	3.2 km	
(1.0 mi)	(0.5 mi)	(1.8 mi)	(1.4 mi)	(1.0 mi)	(0.5 mi)	(1.8 mi)	(1.4 mi)	(1.0 mi)	TABLE 1
1.6 km	0.8 km	2.9 km	2.3 km	1.6 km	0.8 km	2.9 km	2.3 km	1.6 km	Ľ
(1000 ft)	(500 ft)	500 m (1500 ft)	400 m (1250 ft)	(1000 ft)	(500 ft)	(1500 ft)	(1250 ft)	(1000 ft)	_
300 m	150 m	500 m		300 m	150 m	500 m	400 m	300 m	
(0.3 mi)	(0.1 mi)	2.5 km (1.6 mi)	1.0 km (0.7 mi)	(0.3 mi)	(0.1 mi)	(1.6 mi)	(0.7 mi)	(0.3 mi)	
0.5 km	0.2 km	2.5 km	1.0 km	0.5 km	0.2 km	2.5 km	1.0 km	0.5 km	nditions
(0.1 mi)	(0.1 mi)	(0.3 mi)	0.2 km (0.2 mi)	(0.1 mi)	(0.1 mi)	(0.3 mi)	(0.2 mi)	(0.1 mi)	heric co
0.1 km	0.1 km	0.5 km (0.3 mi)	0.2 km	0.1 km	0.1 km	0.5 km	0.2 km	0.1 km	atmosp
(100 ft)	(100 ft)	(300 ft)	(100 ft)	(100 ft)	(100 ft)	(300 ft)	(100 ft)	(100 ft)	n certain
30 m	30 m	100 m	30 m	30 m	30 m	100 m	30 m	30 m	l larger i
Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)	Liquefied gas, poisonous, flammable, corrosive, n.o.s. Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	Liquefied gas, toxic, flammable, corrosive, n.o.s. Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	"+" means distance can be larger in certain atmospheric conditions
125	125	119	119	119	119	119	119	119	
3308	3308	3309	3309	3309	3309	3309	3309	3309	
								D 00	20

			SMALL SPILLS (From a small package or small leak from a large package)	SM ,	SMALL SPILLS kage or small leak fr	PILLS leak fro	ım a large	package)	(Fro	n a large p	LARGE ackage or f	LARGE SPILLS (From a large package or from many small packages)	mall packa	(seb)
			First ISOLATE in all Directions	v.	pers	Th PRO:	Then PROTECT persons Downwind during	.ing	F ISOI	First ISOLATE in all Directions	8.	Then PROTECT persons Downwind during	en ECT wind durin	D
<u>°</u>	Guide	NAME OF MATERIAL	Meters (Feet)		DAY lometers	(Miles)	NIGHT Kilometers (Miles)	i HT rs (Miles)	Meters	Meters (Feet)	D Kilomete	DAY Kilometers (Miles)	NIGHT Kilometers	NIGHT 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. 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)	(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)	(0.2 mi) 1.0 km (0.7 mi)	(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)		.1 km ((0.1 mi)	0.1 km (0.1 mi) 0.5 km (0.3 mi)		300 m	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	(200 ft)	0.8 km	(0.5 mi)	2.0 km	(1.3 mi)
3310	124	Liqueffed gas, toxic, oxidizing, corrosive, n.o.s. Liqueffed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	100 m (300 ft)		0.5 km ((0.3 mi)	(0.3 mi) 2.5 km (1.6 mi)	(1.6 mi)	500 m	(1500 ft)	2.9 km	(1.8 mi)	9.2 km	(5.7 mi)

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(3.2 mi)	(2.0 mi)	(1.3 mi)	(1.3 mi)	(6.3 mi)	(2.1 mi)	(1.8 mi)	(1.3 mi)	(6.3 mi)	
5.1 km	3.2 km	2.0 km	2.1 km	10.1 km	3.4 km	2.9 km	2.0 km	10.1 km	
(1.4 mi)	(1.0 mi)	(0.5 mi)	(0.5 mi)	(3.6 mi)	(0.8 mi)	(0.6 mi)	(0.5 mi)	(3.6 mi)	
2.3 km	1.6 km	0.8 km	0.8 km	5.7 km	1.3 km	1.0 km	0.8 km	5.7 km	ı
(1250 ft)	(1000 ft)	(500 ft)	(500 ft)	1000 m (3000 ft)	300 m (1000 ft)	(500 ft)	(500 ft)	1000 m (3000 ft)	
400 m	300 m	150 m	150 m		300 m	150 m	150 m		
(0.7 mi)	(0.3 mi)	(0.1 mi)	(0.1 mi)	(2.4 mi)	(0.1 mi) 0.4 km (0.2 mi)	(0.2 mi)	(0.1 mi)	3.8 km (2.4 mi)	
1.0 km	0.5 km	0.2 km	0.2 km	3.8 km	0.4 km	0.3 km	0.2 km	3.8 km	
(0.2 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.6 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.6 mi)	
0.2 km	0.1 km	0.1 km	0.1 km	1.0 km	0.1 km	0.1 km	0.1 km	1.0 km	
(100 ft)	(100 ft)	(100 ft)	(100 ft)	(500 ft)	(100 ft)	(100 ft)	(100 ft)	(500 ft)	
30 m	30 m	30 m	30 m	150 m	30 m	30 m	30 m	150 m	
Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	Ammonia solution, with more than 50% Ammonia	Insecticide gas, poisonous, flammable, n.o.s. Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)	Insecticide gas, toxic, flammable, n.o.s. Insecticide gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)	
124	124	124	125	119	119	119	119	119	
3310	3310	3310	3318	3355	3355	3355	3355	3355	

			SMALL SPILLS (From a small package or small leak from a large package)	SMALL ackage or s	SMALL SPILLS kage or small leak fre	om a large	package)	(Fro	n a large p	LARGE ackage or f	LARGE SPILLS (From a large package or from many small packages)	mall packa	ges)
			First ISOLATE in all Directions		Then PROTECT persons Downwind during	Then PROTECT Is Downwind du	ring	ISOI IO III oi	First ISOLATE in all Directions	8.	Then PROTECT persons Downwind during	n ECT wind during	
<u>ي</u> 2	Guide	Guide NAME OF MATERIAL	Meters (Feet)	Kilome	DAY Kilometers (Miles)	NIC Kilomete	NIGHT Kilometers (Miles)	Meters	Meters (Feet)	D Kilomete	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	HT s (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)	0.4 km	(0.2 mi)	300 m	300 m (1000 ft)	1.3 km	(0.8 mi)	3.4 km (2.1 mi)	(2.1 mi)
3355	119	Insecticide gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	t) 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)	t) 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	156 156	Chlorosilanes, poisonous, corrosive, n.o.s. (when spilled in water) 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)	0.2 km	(0.1 mi)	ш 09	(200 ft)	0.5 km	(0.3 mi)	1.6 km (1.0 mi)	(1.0 mi)
3362	155	Chlorosilanes, poisonous, corrosive, flammable, n.o.s. (when spilled in water) Chlorosilanes, toxic, corrosive, flammable, n.o.s. (when spilled in water)	30 m (100 ft)) 0.1 km	ı (0.1 mi)	0.2 km	(0.1 mi)	ш 09	(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) Toxic 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)	1.2 km	(0.8 mi)	200 m	(600 ft)	2.2 km	(1.4 mi)	4.2 km	(2.6 mi)

<u>=</u>	=	ê	ê	ê	
(0.5 mi)	(3.6 mi)	(0.6 mi)	(2.6 mi)	(0.5 mi)	
0.7 km	5.8 km	1.0 km	4.2 km	0.7 km	
(0.3 mi)	(2.0 mi)	(0.4 mi)	(1.4 mi)	(0.3 mi)	TABLE 1
0.5 km	3.1 km	0.6 km	2.2 km	0.5 km	F
(200 ft)	300 m (1000 ft)	(200 ft)	(600 ft)	(200 ft)	•
e0 m		e0 m	200 m	m 09	
(0.2 mi)	0.5 km (0.3 mi) 1.5 km (0.9 mi)	(0.2 mi)	(0.8 mi)	(0.2 mi)	
0.2 km	1.5 km	0.3 km	1.2 km	0.2 km	nditions
(0.1 mi) 0.2 km	(0.3 mi)	(0.1 mi)	(0.4 mi)	(0.1 mi)	heric co
0.2 km		0.2 km	0.6 km	0.2 km	atmosp
(100 ft)	(200 ft)	(100 ft)	(200 ft)	(100 ft)	in certair
30 m	m 09	30 m	m 09	30 m	larger
Poisonous by inhalation liquid, n.o.s. (Inhalation Hazard Zone B) Toxic by inhalation liquid, n.o.s. (Inhalation Hazard Zone B)	Poisonous by inhalation liquid, flammable, n.o.s. (Inhalation Hazard Zone A) Toxic by inhalation liquid, flammable, n.o.s. (Inhalation Hazard Zone A)	Poisonous by inhalation liquid, flammable, n.o.s. (Inhalation Hazard Zone B) Toxic by inhalation liquid, flammable, n.o.s. (Inhalation Hazard Zone B)	Poisonous by inhalation liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A) Toxic by inhalation liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)	Poisonous by inhalation liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B) Toxic by inhalation liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B)	"+" means distance can be larger in certain atmospheric conditions
151	131	131	139	139	
3382	3383	3384	3385 3385	3386	

			SMALL SPILLS (From a small package or small leak from a large package)	SMALL SPILLS kage or small leak fro	PILLS Ill leak fro	ım a large	package)	(Fro	n a large p	LARGE ackage or f	LARGE SPILLS (From a large package or from many small packages)	small pack	ges)
			First ISOLATE in all Directions	pers	Th PRO- sons Dow	Then PROTECT persons Downwind during	jui	F ISOI ICIIIE ci	First ISOLATE	ed.	Then PROTECT persons Downwind during	en ECT Iwind durir	Ďi
<u>0</u> ≥	Guide	Guide NAME OF MATERIAL	Meters (Feet)	DAY Kilometers (Miles)	۲ s (Miles)	NIGHT Kilometers (Miles)	HT 's (Miles)	Meters	Meters (Feet)	D Kilomete	DAY Kilometers (Miles)	NIC Kilomete	NIGHT Kilometers (Miles)
3387	142	Poisonous by inhalation liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A) Toxic 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)	200 m	(600 ft)	2.2 km	(1.4 mi)	4.2 km	(2.6 mi)
3388	142	Poisonous by inhalation liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B) 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)	30 m	(100 ft)	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) 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)	(0.5 mi)	400 m	400 m (1250 ft)	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) 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)	(0.1 mi)	30 m	(100 ft)	0.4 km	(0.3 mi)	0.6 km	(0.4 mi)

(1.8 mi)	(4.7 mi)	(0.6 mi)	(3.6 ті)	(0.6 ті)	
2.9 km	7.5 km (4.7 mi)	1.0 km	5.8 km	1.0 km	
(0.6 mi)	(3.0 mi)	(0.4 mi)	(2.0 mi)	(0.4 mi)	TABLE 1
1.0 km	4.8 km (3.0 mi)	0.6 km	3.1 km	0.6 km	F
300 m (1000 ft)	0.9 km (0.6 mi) 2.0 km (1.2 mi) 400 m (1250 ft)	(200 ft)	300 m (1000 ft)	(200 ft)	
	400 m	e0 m		m 09	
0.1 km (0.1 mi) 0.3 km (0.2 mi)	(1.2 mi)	0.2 km (0.1 mi) 0.3 km (0.2 mi)	0.5 km (0.3 mi) 1.5 km (0.9 mi)	0.2 km (0.1 mi) 0.3 km (0.2 mi)	(0
0.3 km	2.0 km	0.3 km	1.5 km	0.3 km	nditions
(0.1 mi)	(0.6 mi)	(0.1 mi)	(0.3 mi)	(0.1 mi)	heric co
	0.9 km			0.2 km	atmosp
(100 ft)	100 m (300 ft)	(100 ft)	(200 ft)	(100 ft)	in certair
30 m	100 m	30 m	ш 09	30 m	larger
Nitrosylsuffuric acid, solid (when spilled in water) Nitrosylsulphuric acid, solid (when spilled in water)	Poisonous by inhalation liquid, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A) Toxic by inhalation liquid, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	Poisonous by inhalation liquid, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B) Toxic by inhalation liquid, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	Poisonous by inhalation liquid, water-reactive, flammable, n.o.s. (Inhalation Hazard Zone A) Toxic by inhalation liquid, water reactive, flammable, n.o.s. (Inhalation Hazard Zone A)	Poisonous by inhalation liquid, water-reactive, flammable, n.o.s. (Inhalation Hazard Zone B) Toxic by inhalation liquid, water reactive, flammable, n.o.s. (Inhalation Hazard Zone B)	"+" means distance can be larger in certain atmospheric conditions
157	131	131	155	155	
3456	3488	3489	3490	3491	

			SMALL SPILLS (From a small package or small leak from a large package)	SMALL SPILLS kage or small leak fro	SPILLS all leak fro	ım a large	package)	(Fro	n a large p	LARGE ackage or f	LARGE SPILLS (From a large package or from many small packages)	small packa	(seb)
			First ISOLATE in all Directions	led	Then PROTECT persons Downwind during	Then PROTECT IS Downwind dur	ing	F ISOI IO III DI	First ISOLATE in all Directions	<u>e</u>	Then PROTECT persons Downwind during	en ECT ewind durir	0
<u>.</u> 9	Guide	Guide NAME OF MATERIAL	Meters (Feet)	D/ Kilometer	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	sHT rs (Miles)	Meters	Meters (Feet)	D Kilomete	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	NIGHT leters (Miles)
3492	131	Poisonous by inhalation liquid, corrosive, flammable, n.o.s. (Inhalation Hazard Zone A) Toxic by inhalation liquid, corrosive, flammable, 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)
3493	131	Poisonous by inhalation liquid, corrosive, flammable, n.o.s. (Inhalation Hazard Zone B) Toxic by inhalation liquid, corrosive, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km	(0.1 mi)	0.3 km	(0.2 mi)	m 09	(200 ft)	0.6 km	(0.4 mi)	1.0 km	(0.6 ті)
3494	131	Petroleum sour crude oil, flammable, poisonous Petroleum sour crude oil, flammable, toxic	30 m (100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.2 mi)	m 09	(200 ft)	0.5 km	(0.3 mi)	0.7 km	(0.5 mi)
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)	0.1 km (0.1 mi)	(0.1 mi)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)

(0.2 mi)	(0.1 mi)	(0.2 mi)	(0.1 mi)	(0.2 mi)	
0.2 km	0.1 km	0.2 km	0.1 km	0.2 km	
(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	TABLE 1
0.1 km	0.1 km	0.1 km	0.1 km	0.1 km	F
(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	•
30 m	30 m	30 m	30 m	30 m	
(0.1 mi)	(0.1 mi)	(0.1 mi)	0.1 km (0.1 mi) 0.1 km (0.1 mi)	(0.1 mi)	
0.1 km	0.1 km	0.1 km	0.1 km	0.1 km	nditions
(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	oheric co
0.1 km	0.1 km	0.1 km	0.1 km	0.1 km	atmosp
(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	in certair
30 m	30 m	30 m	30 m	30 m	larger
Adsorbed gas, poisonous, n.o.s. Adsorbed gas, poisonous, n.o.s. (Inhalation hazard zone A)	Adsorbed gas, poisonous, n.o.s. (Inhalation hazard zone B) Adsorbed gas, poisonous, n.o.s. (Inhalation hazard zone C) Adsorbed gas, poisonous, n.o.s. (Inhalation hazard zone C)	Adsorbed gas, toxic, n.o.s. Adsorbed gas, toxic, n.o.s. (Inhalation hazard zone A)	Adsorbed gas, toxic, n.o.s. (Inhalation hazard zone B) Adsorbed gas, toxic, n.o.s. (Inhalation hazard zone C) Adsorbed gas, toxic, n.o.s. (Inhalation hazard zone D)	Adsorbed gas, poisonous, flammable, n.o.s. Adsorbed gas, poisonous, flammable, n.o.s. (Inhalation hazard zone A)	"+" means distance can be larger in certain atmospheric conditions
173	173	173	173	173	
3512 3512	3512 3512 3512	3512 3512	3512 3512 3512	3514	

			SMALL SPILLS (From a small package or small leak from a large package)	SMAL ackage or	SMALL SPILLS kage or small leak fr	S from a larg	e package)	(Fron	n a large p	LARGE SPILLS (From a large package or from many small packages)	LARGE SPILLS ckage or from many s	small packa	iges)
			First ISOLATE in all Directions	S	PR persons D	Then PROTECT persons Downwind during	uring	F 1081 ID lle ui	First ISOLATE in all Directions	ed.	Then PROTECT persons Downwind during	en T ECT nwind durir	Ō
<u>0</u> 8′	Guide	Guide NAME OF MATERIAL	Meters (Feet)		DAY Kilometers (Miles)		NIGHT Kilometers (Miles)	Meters	Meters (Feet)	Kilomete	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	SHT rs (Miles)
3514	173	Adsorbed gas, poisonous, flammable, n.o.s. (Inhalation											
3514	173	nazard zone B) Adsorbed gas, poisonous, flammable, n.o.s. (Inhalation	30 m (100 ft)		0.1 km (0.1 mi) 0.1 km (0.1 mi)	i) 0.1 km	(0.1 mi)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)
3514	173	hazard zone C.) Adsorbed gas, poisonous, flammable, n.o.s. (Inhalation hazard zone D.)											
3514	173	Adsorbed gas, toxic,											
3514	173	Adsorbed gas, toxic, flammable, n.o.s. (Inhalation hazard zone A)	30 m (100 ft)		0.1 km (0.1 mi) 0.1 km (0.1 mi)	i) 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											
3514	173	Adsorbed gas, toxic, flammable, n.o.s. (Inhalation	30 m (100 ft)	t) 0.1 km	m (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)
3514	173	hazard zone C.) Adsorbed gas, toxic, flammable, n.o.s. (Inhalation hazard zone D)											

(0.2 mi)	(0.1 mi)	(0.2 mi)	(0.1 mi)	(0.2 mi)	
0.2 km	0.1 km	0.2 km	0.1 km	0.2 km	
(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	TABLE 1
0.1 km	0.1 km	0.1 km	0.1 km	0.1 km	F
(100 ft)	(100 ft)	(100 ft)	(100 ft)	(100 ft)	
30 m	30 m	30 m	30 m	30 m	
(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	
0.1 km	0.1 km	0.1 km	0.1 km	0.1 km	nditions
(0.1 mi)	(0.1 mi)	0.1 km (0.1 mi) 0.1 km (0.1 mi)	(0.1 mi)	(0.1 mi)	heric co
0.1 km	0.1 km	0.1 km	0.1 km	0.1 km	atmosp
(100 ft)	(100 ft)	30 m (100 ft)	(100 ft)	(100 ft)	in certair
30 m	30 m	30 m	30 m	30 m	largeri
Adsorbed gas, poisonous, oxidizing, n.o.s. Adsorbed gas, poisonous, oxidizing, n.o.s. (Inhalation hazard zone A)	Adsorbed gas, poisonous, oxidizing, n.o.s. (Inhalation hazard zone B) Adsorbed gas, poisonous, oxidizing, n.o.s. (Inhalation hazard zone C) Adsorbed gas, poisonous, oxidizing, n.o.s. (Inhalation hazard zone D)	Adsorbed gas, toxic, oxidizing, n.o.s. Adsorbed gas, toxic, oxidizing, n.o.s. (Inhalation hazard zone A)	Adsorbed gas, toxic, oxidizing, n.o.s. (Inhalation hazard zone B) Adsorbed gas, toxic, oxidizing, n.o.s. (Inhalation hazard zone C) Adsorbed gas, toxic, oxidizing, n.o.s. (Inhalation hazard zone C) Adsorbed gas, toxic, oxidizing, n.o.s. (Inhalation hazard zone D)	Adsorbed gas, poisonous, cornosive, n.o.s. Adsorbed gas, poisonous, corrosive, n.o.s. (Inhalation hazard zone A)	"+" means distance can be larger in certain atmospheric conditions
173	173	173	173	173	
3515	3515 3515 3515	3515	3515 3515 3515	3516 3516	

			SMALL SPILLS (From a small package or small leak from a large package)	S all pack	MALL (SMALL SPILLS kage or small leak fro	om a large	package)	(Froi	m a large p	LARGE ackage or f	LARGE SPILLS (From a large package or from many small packages)	mall packa	(səbì
			First ISOLATE in all Directions	元 tions	led	Then PROTECT persons Downwind during	Then PROTECT ns Downwind dur	ring	F ISO in all D	First ISOLATE in all Directions	ed.	Then PROTECT persons Downwind during	en ECT Iwind durin	Ō
<u>.</u> 98	Guide	NAME OF MATERIAL	Meters (Feet)	-eet)	D/ Kilometer	DAY Kilometers (Miles)		NIGHT Kilometers (Miles)	Meters	Meters (Feet)	D Kilomete	DAY Kilometers (Miles)	NIC Kilomete	NIGHT Kilometers (Miles)
3516	173	Adsorbed gas, poisonous, corrosive, n.o.s. (Inhalation												
3516	173	nazard zone B) Adsorbed gas, poisonous, corrosive, n.o.s. (Inhalation	30 m (100 ft)	(H) 00	0.1 km	(0.1 mi)	0.1 km	0.1 km (0.1 mi) 0.1 km (0.1 mi)	30 m	30 m (100 ft)	0.1 km	0.1 km (0.1 mi)	0.1 km (0.1 mi)	(0.1 mi)
3516	173	hazard zone C.) Adsorbed gas, poisonous, corrosive, n.o.s. (Inhalation hazard zone D.)												
3516	173	Adsorbed gas, toxic, corrosive,												
3516	173	Adsorbed gas, toxic, corrosive, n.o.s. (Inhalation hazard zone A)	30 m (100 ft) 0.1 km (0.1 mi) 0.1 km (0.1 mi)	(t) (00	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)		30 m (100 ft)	0.1 km	0.1 km (0.1 mi) 0.2 km (0.2 mi)	0.2 km	(0.2 mi)
3516	173	Adsorbed gas, toxic, corrosive, n.o.s. (Inhalation hazard												
3516	173	Adsorbed gas, toxic, corrosive, n.o.s. (Inhalation hazard	30 m (1	(100 ft)	0.1 km	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)
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 (1	(100 ft)	0.1 km	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)

(0.1 mi)	(0.2 mi)	(0.1 mi)	(0.2 mi)	
0.1 km	0.2 km	0.1 km	0.2 km	
(0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	TABLE 1
0.1 km	0.1 km	0.1 km	0.1 km	F
(100 ft)	(100 ft)	(100 ft)	(100 ft)	
30 m	30 m	30 m	30 m	
(0.1 mi)	0.1 km (0.1 mi) 0.1 km (0.1 mi)	(0.1 mi)	0.1 km (0.1 mi) 0.1 km (0.1 mi)	
0.1 km	0.1 km	0.1 km	0.1 km	nditions
0.1 km (0.1 mi)	(0.1 mi)	(0.1 mi)	(0.1 mi)	oheric co
		0.1 km	0.1 km	n atmosp
(100 ft)	(100 ft)	(100 ft)	(100 ft)	in certair
30 m	30 m	30 m	30 m	larger
Adsorbed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation hazard zone B) Adsorbed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation hazard zone C) Adsorbed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation hazard zone D)	Adsorbed gas, toxic, flammable, corrosive, n.o.s Adsorbed gas, toxic, flammable, corrosive, n.o.s. (Inhalation hazard zone A)	Adsorbed gas, toxic, flammable, corroswe, n.o.s. (Inhalation hazard zone B) Adsorbed gas, toxic, flammable, corroswe, n.o.s. (Inhalation hazard zone C) Adsorbed gas, toxic, flammable, corroswe, n.o.s. (Inhalation hazard zone D)	Adsorbed gas, poisonous, oxidizing, corrosive, n.o.s Adsorbed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation hazard zone A)	"+" means distance can be larger in certain atmospheric conditions
173	173	173	173	
3517 3517 3517	3517	3517 3517 3517	3518	

			(From a s	SMALL SPILLS From a small package or small leak from a large package)	SMALL SPILLS kage or small leak fr	SPILLS all leak fro	om a large	package)	(Fror	n a large p	LARGE ackage or f	LARGE SPILLS (From a large package or from many small packages)	mall packa	ges)
			1 SOL in all Di	First ISOLATE in all Directions	ed	TF PRO : rsons Dow	Then PROTECT persons Downwind during	ing	F ISOI in all D	First ISOLATE in all Directions	ed	Then PROTECT persons Downwind during	n ECT wind during	D
<u>.</u> 9	Guide	Guide NAME OF MATERIAL	Meters	Meters (Feet)	DAY Kilometers	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	i HT rs (Miles)	Meters	Meters (Feet)	D Kilomete	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	HT s (Miles)
3518	173	Adsorbed gas, poisonous, oxidizing, corrosive, n.o.s.												
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)	(0.1 mi)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)
3518	173	(Inhalation hazard zone C) Adsorbed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation hazard zone D)												
3518	173	Adsorbed gas, toxic, oxidizing,												
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) 0.1 km (0.1 mi)	(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												
3518	173	Adsorbed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km (0.1 mi) 0.1 km (0.1 mi)	(0.1 mi)	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)
3518	173	Nazard zone C.) 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)

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

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)
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)	0.2 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)	0.2 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)
3525	173	Phosphine, adsorbed	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	ш 0£	(100 ft)	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)	ш 0£	(100 ft)	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)	0.4 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)	0.5 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	Chloropivaloyl chloride	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)

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.

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

ID No.	Guide No.	e Name of Mater	ial			TIH Gas(es) Produced
1162	155	Dimethyldichlorosil	ane			HCI
1183	139	Ethyldichlorosilane				HCI
1196	155	Ethyltrichlorosilane				HCI
1242	139	Methyldichlorosilar	ie			HCI
1250	155	Methyltrichlorosilar	ne			HCI
1295	139	Trichlorosilane				HCI
1298	155	Trimethylchlorosila	ne			HCI
1305	155P	Vinyltrichlorosilane				HCI
1305	155P	Vinyltrichlorosilane	, stabiliz	ed		HCI
1340	139	Phosphorus pentas Phosphorus	sulfide, f	ree from yellow and white		H_2S
1340	139	Phosphorus pentas Phosphorus	sulphide	, free from yellow and white		H_2S
1360	139	Calcium phosphide)			PH_3
1384	135	Sodium dithionite				H ₂ S SO ₂
1384	135	Sodium hydrosulfit	е			H ₂ S SO ₂
1384	135	Sodium hydrosulph	nite			H ₂ S SO ₂
1390	139	Alkali metal amides	6			NH ₃
1397	139	Aluminum phosphi	de			PH_3
1419	139	Magnesium alumin	um phos	sphide		$PH_{_3}$
1432	139	Sodium phosphide				$PH_{_3}$
1541	155	Acetone cyanohyd	rin, stabi	ilized		HCN
1680	157	Potassium cyanide	, solid			HCN
1689	157	Sodium cyanide, s	olid			HCN
Chemica Br ₂ Cl ₂ HBr HCI HCN	Brom Chlor Hydro Hydro		HF HI H ₂ S H ₂ S NH ₃) Gases: Hydrogen fluoride Hydrogen iodide Hydrogen sulfide Hydrogen sulphide Ammonia	NO ₂ PH ₃ SO ₂ SO ₂	Nitrogen dioxide Phosphine Sulfur dioxide Sulphur dioxide

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

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

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

Br,	Bromine	HF	Hydrogen fluoride	NO ₂	Nitrogen dioxide
CI,	Chlorine	HI	Hydrogen iodide	PH,	Phosphine
HÉr	Hydrogen bromide	H,S	Hydrogen sulfide	SO	Sulfur dioxide
HCI	Hydrogen chloride	Η̈́,S	Hydrogen sulphide	SO,	Sulphur dioxide
HCN	Hydrogen cyanide	NĦ,	Ammonia	2	•

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

ID No.	Guid No.	e Name of Material	TIH Gas(es) Produced
1777	137	Fluorosulfonic acid	HF
1777	137	Fluorosulphonic acid	HF
1781	156	Hexadecyltrichlorosilane	HCI
1784	156	Hexyltrichlorosilane	HCI
1799	156	Nonyltrichlorosilane	HCI
1800	156	Octadecyltrichlorosilane	HCI
1801	156	Octyltrichlorosilane	HCI
1804	156	Phenyltrichlorosilane	HCI
1806	137	Phosphorus pentachloride	HCI
1808	137	Phosphorus tribromide	HBr
1809	137	Phosphorus trichloride	HCI
1810	137	Phosphorus oxychloride	HCI
1815	132	Propionyl chloride	HCI
1816	155	Propyltrichlorosilane	HCI
1818	157	Silicon tetrachloride	HCI
1828	137	Sulfur chlorides	HCI SO ₂ H ₂ S
1828	137	Sulphur chlorides	HCI SO ₂ H ₂ S
1834	137	Sulfuryl chloride	HCI
1834	137	Sulphuryl chloride	HCI
1836	137	Thionyl chloride	HCI SO ₂
1838	137	Titanium tetrachloride	HCI
1898	156	Acetyl iodide	HI
1923	135	Calcium dithionite	H ₂ S SO ₂
Chemica	al Sym	pols for TIH (PIH in the US) Gases:	
Br ₂ Cl ₂ HBr HCl HCN	Brom Chlo Hydr Hydr	ine HF Hydrogen fluoride NC	H ₃ Phosphine D ₂ Sulfur dioxide

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

ID No.	Guid No.	e Name of Materia	I			TIH Gas(es) Produced
1923	135	Calcium hydrosulfite				H ₂ S SO ₂
1923	135	Calcium hydrosulphit	е			H ₂ S SO ₂
1929	135	Potassium dithionite				H ₂ S SO ₂
1929	135	Potassium hydrosulfi	te			H ₂ S SO ₂
1929	135	Potassium hydrosulp	hite			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 phosphic	de			PH_3
2012	139	Potassium phosphide	9			PH_3
2013	139	Strontium phosphide				PH_3
2308	157	Nitrosylsulfuric acid,	liquid			NO ₂
2308	157	Nitrosylsulphuric acid	l, liquid			NO ₂
2353	132	Butyryl chloride				HCI
2395	132	Isobutyryl chloride				HCI
2434	156	Dibenzyldichlorosilan	e			HCI
2435	156	Ethylphenyldichlorosi	ilane			HCI
2437	156	Methylphenyldichloro	silane			HCI
2495	144	lodine pentafluoride				HF
2691	137	Phosphorus pentabro	omide			HBr
2692	157	Boron tribromide				HBr
2806	139	Lithium nitride				NH_3
Chemi Br ₂ Cl ₂ HBr	Bro Ch	mbols for TIH (PIH in omine lorine drogen bromide	the US HF HI H ₂ S) Gases: Hydrogen fluoride Hydrogen iodide Hydrogen sulfide	NO ₂ PH ₃ SO ₂	Nitrogen dioxide Phosphine Sulfur dioxide
HCI HCN	Нý	drogen bronnde drogen chloride drogen cyanide	H ₂ S NH ₃	Hydrogen sulphide Ammonia	SO ₂	Sulphur dioxide

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

ID No.	Guid No.	e 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	HCI
2986	155	Chlorosilanes, corrosive, flammable, n.o.s	HCI
2987	156	Chlorosilanes, corrosive, n.o.s	HCI
2988	139	Chlorosilanes, water-reactive, flammable, corrosive, n.o.s.	HCI
3048	157	Aluminum phosphide pesticide	PH_3
3361	156	Chlorosilanes, poisonous, corrosive, n.o.s.	HCI
3361	156	Chlorosilanes, toxic, corrosive, n.o.s.	HCI
3362	155	Chlorosilanes, poisonous, corrosive, flammable, n.o.s.	HCI
3362	155	Chlorosilanes, toxic, corrosive, flammable, n.o.s.	HCI
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

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

Br.	Bromine	HF	Hydrogen fluoride	NO.	Nitrogen dioxide
CI,	Chlorine	HI	Hydrogen iodide	PH.,	Phosphine
HÉr	Hydrogen bromide	H _s S	Hydrogen sulfide	SO	Sulfur dioxide
HCI	Hydrogen chloride	HĴS	Hydrogen sulphide	SO,	Sulphur dioxide
HCN	Hydrogen cyanide	Nĥ.	Ammonia	2	·

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	OLATIO	N AND F	PROTE(OF S	CTIVE A	CTION MON TI	DISTAN IH (PIH	ICES F	OTECTIVE ACTION DISTANCES FOR LARGE OF SIX COMMON TIH (PIH in the US) GASES	GE SPI ES	ILLS FO	OR DIFF	ERENT	QUANI	TIES
	First IS	First ISOLATE				The	en PROT	Then PROTECT persons Downwind during	ons Dowr	wind duri	ng			
	<u> </u>				DAY	<u>\</u>					NIGHT	ŦĦ		
			Low wind (< 6 mph = < 10 km/h)	Low wind (< 6 mph = < 10 km/h)	Moderate wind (6-12 mph = 10 - 20 km/h)	te wind nph = km/h)	High (> 12 - > 20 !	High wind (> 12 mph = > 20 km/h)	Low wind (< 6 mph = < 10 km/h)	Low wind (< 6 mph = < 10 km/h)	Moderate wind (6-12 mph = 10 - 20 km/h)	loderate wind (6-12 mph = 10 - 20 km/h)	High wind (> 12 mph = > 20 km/h)	wind mph = (m/h)
	Meters	(Feet)	Æ	(Miles)	km	(Miles)	ĸ	(Miles)	ĸ	(Miles)	km	(Miles)	Æ	(Miles)
TRANSPORT CONTAINER	UN100	UN1005 Ammonia, anhydrous: Large Spills	nonia, a	ınhydro	ous: La	rge Sp	ills							
Rail tank car	300	(1000)	1.9	(1.2)	1.5	(0.9)	1.1	(9.0)	4.5	(2.8)	2.5	(1.5)	1.4	(6.0)
Highway tank truck or trailer	150	(200)	6.0	(9.0)	0.5	(0.3)	9.0	(0.3)	2.0	(1.3)	0.8	(0.5)	9.0	(0.4)
Agricultural nurse tank	09	(200)	0.5	(0.3)	0.3	(0.2)	0.3	(0.2)	1.4	(6.0)	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	UN101	UN1017 Chlorine: Large Spills	rine: La	arge Sp	sills									
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	009	(2000)	5.8	(3.6)	3.4	(2.1)	2.9	(1.8)	6.7	(4.3)	2.0	(3.1)	4.1	(2.5)
Multiple ton cylinders	300	(1000)	2.1	(1.3)	1.3	(0.8)	1.0	(9.0)	4.0	(2.5)	2.4	(1.5)	1.3	(0.8)
Multiple small cylinders or single ton cylinder	150	(200)	1.5	(0.9)	8:0	(0.5)	0.5	(0.3)	5.9	(1.8)	1.3	(0.8)	9.0	(0.4)

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

			5					200	3					
	First ISOLATE	ш 8				The	en PROT i	Then PROTECT persons Downwind during	ons Dowr	wind duri	Вu			
		 <u>₽</u>			DAY	<u></u>					NIGHT	노		
			Low wind (< 6 mph = < 10 km/h)	vind ph = m/h)	Moderate wind (6-12 mph = 10 - 20 km/h)	te wind nph = km/h)	High wind (> 12 mph = > 20 km/h)	wind nph = m/h)	Low wind (< 6 mph = < 10 km/h)	wind hqr = hqr)	Moderate wind (6-12 mph = 10 - 20 km/h)	te wind nph = km/h)	High wind (> 12 mph = > 20 km/h)	wind nph = cm/h)
	Meters (Fe	(Feet)	ĸ E	(Miles)	ᄧ	(Miles)	Æ	(Miles)	Ē	(Miles)	ĸ	(Miles)	톲	(Miles)
TRANSPORT	UN1040 Ethylene oxide: Large Spills	thyle	ne ox	ide: La	rge Sp]∥s								
CONTAINER	UN1040 Ethylene oxide with Nitrogen: Large Spills	thyle	ne oxi	ide wit	h Nitro	gen: L	arge S _l	pills						
Rail tank car	200 (600)	(00	1.6	(1.0)	0.8	(0.5)	0.7	(0.5)	3.3	(2.1)	1.4	(6.0)	0.8	(0.5)
Highway tank truck or trailer	100 (300)	(00	6.0	(9.0)	0.5	(0.3)	9.0	(0.3)	2.0	(1.3)	0.7	(0.4)	0.4	(0.3)
Multiple small cylinders or single ton cylinder	30 (10	(100)	0.4	(0.3)	0.2	(0.1)	0.1	(0.1)	6.0	(9.0)	0.3	(0.2)	0.2	(0.1)
TRANSPORT	UN1050 Hydrogen chloride, anhydrous: Large Spills	ydro	gen cł	hloride	, anhy	drous:	Large	Spills	;					
CONTAINER	UN2186 Hydrogen chloride, refrigerated liquid: Large Spills	ydro	gen c	hloride	, refrig	erated	liguid:	Large	Spills					
Rail tank car	500 (1500)	(00	3.9	(5.2)	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 (60	(009)	1.5	(6.0)	0.8	(0.5)	9.0	(0.4)	3.9	(2.5)	1.5	(0.9)	8.0	(0.5)
Multiple ton cylinders	30 (10	(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 (10	(100)	0.3	(0.2)	0.2	(0.1)	0.1	(0.1)	6.0	(9.0)	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	ш				The	n PROT	ECT pers	ons Dowl	Then PROTECT persons Downwind during	ng			
					DAY	>_					NIGHT	눞		
			Low wind (< 6 mph = < 10 km/h)	vind ph = h/h)	Moderate wind (6-12 mph = 10 - 20 km/h)	te wind nph = km/h)	High wind (> 12 mph = > 20 km/h)	wind mph = m/h)	Low wind (< 6 mph = < 10 km/h)	Low wind (< 6 mph = < 10 km/h)	Moderate wind (6-12 mph = 10 - 20 km/h)	te wind nph = km/h)	High (> 12 > 20	High wind (> 12 mph = > 20 km/h)
	Meters (Feet)	- Fi	Ē	(Miles)	Ē	(Miles)	Æ	(Miles)	Æ	(Miles)	Ē	(Miles)	Ē	(Miles)
TRANSPORT CONTAINER	UN1052 Hydrogen fluoride, anhydrous: Large Spills	/drog	Jen flu	noride,	, anhyo	Irons:	Large \$	Spills						
Rail tank car	500 (1500)	(00	3.5	(2.2)	2.1	(1.3)	1.8	(1.2)	9.9	(4.1)	3.1	(1.9)	2.0	(1.2)
Highway tank truck or trailer	200 (700)	(0	2.0	(1.2)	1.0	(0.7)	6.0	(9.0)	3.7	(2.3)	1.6	(1.0)	6.0	(9.0)
Multiple small cylinders or single ton cylinder	100 (300)		8.0	(0.5)	0.4	(0.2)	0.3	(0.2)	1.7	(1.1)	0.5	(0.3)	0.3	(0.2)
TRANSPORT CONTAINER	UN1079 Sulfur dioxide/Sulphur dioxide: Large Spills	ılfur	dioxic	Je/Sul	ohur di	oxide:	Large	Spills						
Rail tank car	1000 (3000)		11+	(7+)	11+	(7+)	7.2	(4.5)	11+	(+/)	11+	(7+)	10.1	(6.3)
Highway tank truck or trailer	1000 (3000)	(0)	11+	(7+)	6.2	(3.8)	5.3	(3.3)	‡	(7+)	8.2	(5.1)	6.2	(3.9)
Multiple ton cylinders	500 (1500)	(0)	5.4	(3.4)	2.4	(1.5)	1.8	(1.1)	7.8	(4.8)	4.2	(5.6)	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)