

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters (Feet)	Kilometers (Miles)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters (Feet)	Kilometers (Miles)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
2988	Chlorosilanes, n.o.s. (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)		125 m (400 ft)	1.1 km (0.7 mi)	2.9 km (1.8 mi)	
2988	Chlorosilanes, water-reactive, flammable, corrosive, n.o.s. (when spilled in water)								
3023	2-Methyl-2-heptanethiol tert-Octyl mercaptan	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)		60 m (200 ft)	0.5 km (0.3 mi)	1.1 km (0.7 mi)	
3048	Aluminum phosphide pesticide (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)		215 m (700 ft)	1.9 km (1.2 mi)	5.3 km (3.3 mi)	
3049	Metal alkyl halides, n.o.s. (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)		30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	
3049	Metal alkyl halides, water-reactive, n.o.s. (when spilled in water)								
3049	Metal aryl halides, n.o.s. (when spilled in water)								
3049	Metal aryl halides, water-reactive, n.o.s. (when spilled in water)								
3052	Aluminum alkyl halides (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)		30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	
3057	Trifluoroacetylchloride	30 m (100 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)		430 m (1400 ft)	4.0 km (2.5 mi)	8.5 km (5.3 mi)	
3079	Methacrylonitrile, inhibited	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)		60 m (200 ft)	0.6 km (0.4 mi)	1.6 km (1.0 mi)	
3083	Perchloryl fluoride	30 m (100 ft)	0.2 km (0.1 mi)	1.0 km (0.6 mi)		215 m (700 ft)	2.3 km (1.4 mi)	5.6 km (3.5 mi)	

3122	Poisonous liquid, oxidizing, n.o.s. (when 'Inhalation Hazard' is on a package or shipping paper)	155 m (500 ft)	1.3 km (0.8 mi)	3.4 km (2.1 mi)	915 m (3000 ft)	8.7 km (5.4 mi) 11.0+ km (7.0+ mi)
3122	Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)					
3122	Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	125 m (400 ft)	1.1 km (0.7 mi) 2.7 km (1.7 mi)
3122	Toxic liquid, oxidizing, n.o.s. (when 'Inhalation Hazard' is on a package or shipping paper)	155 m (500 ft)	1.3 km (0.8 mi)	3.4 km (2.1 mi)	915 m (3000 ft)	8.7 km (5.4 mi) 11.0+ km (7.0+ mi)
3122	Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)					
3122	Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	125 m (400 ft)	1.1 km (0.7 mi) 2.7 km (1.7 mi)
3123	Poisonous liquid, water-reactive, n.o.s. (when 'Inhalation Hazard' is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	4.3 km (2.7 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi) 11.0+ km (7.0+ mi)
3123	Poisonous liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)					
3123	Poisonous liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	245 m (800 ft)	2.3 km (1.4 mi) 5.0 km (3.1 mi)
3123	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (when 'Inhalation Hazard' is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	4.3 km (2.7 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi) 11.0+ km (7.0+ mi)
3123	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)					
3123	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	245 m (800 ft)	2.3 km (1.4 mi) 5.0 km (3.1 mi)

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

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		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters (Feet)	Kilometers (Miles)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters (Feet)	Kilometers (Miles)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
3123	Toxic liquid, water-reactive, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	4.3 km (2.7 mi)		915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)	
3123	Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)								
3123	Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)		245 m (800 ft)	2.3 km (1.4 mi)	5.0 km (3.1 mi)	
3123	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	4.3 km (2.7 mi)		915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)	
3123	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)								
3123	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)		245 m (800 ft)	2.3 km (1.4 mi)	5.0 km (3.1 mi)	
3160	Liquefied gas, poisonous, flammable, n.o.s.	185 m (600 ft)	1.8 km (1.1 mi)	5.6 km (3.5 mi)		915 m (3000 ft)	10.8 km (6.7 mi)	11.0+ km (7.0+ mi)	
3160	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)								
3160	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)		305 m (1000 ft)	3.1 km (1.9 mi)	7.7 km (4.8 mi)	

3160	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.2 km (0.1 mi)	1.0 km (0.6 mi)	215 m (700 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)
3160	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3160	Liquefied gas, toxic, flammable, n.o.s.	185 m (600 ft)	1.8 km (1.1 mi)	5.6 km (3.5 mi)	915 m (3000 ft)	10.8 km (6.7 mi)	11.0+ km (7.0+ mi)
3160	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)						
3160	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	305 m (1000 ft)	3.1 km (1.9 mi)	7.7 km (4.8 mi)
3160	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.2 km (0.1 mi)	1.0 km (0.6 mi)	215 m (700 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)
3160	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3162	Liquefied gas, poisonous, n.o.s.	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3162	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)						
3162	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	430 m (1400 ft)	4.0 km (2.5 mi)	9.8 km (6.1 mi)
3162	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	215 m (700 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
3162	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3162	Liquefied gas, toxic, n.o.s.	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3162	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)						
3162	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	430 m (1400 ft)	4.0 km (2.5 mi)	9.8 km (6.1 mi)
3162	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	215 m (700 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)

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ID No.	NAME OF MATERIAL	First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	Feet	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	Feet	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
3162	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m	(600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3246	Methanesulfonyl chloride 3246 Methanesulphonyl chloride	95 m	(300 ft)	0.6 km (0.4 mi)	2.4 km (1.5 mi)	245 m	(800 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)
3275	Nitriles, poisonous, flammable, n.o.s. (when 'Inhalation Hazard' is on a package or shipping paper)	30 m (100 ft)		0.2 km (0.1 mi)	0.5 km (0.3 mi)	60 m (200 ft)		0.6 km (0.4 mi)	1.6 km (1.0 mi)
3275	Nitriles, toxic, flammable, n.o.s. (when 'Inhalation Hazard' is on a package or shipping paper)								
3276	Nitriles, poisonous, n.o.s. 3276 Nitriles, toxic, n.o.s.	30 m	(100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	60 m	(200 ft)	0.6 km (0.4 mi)	1.6 km (1.0 mi)
3278	Organophosphorus compound, poisonous, n.o.s. (when 'Inhalation Hazard' is on a package or shipping paper)	60 m (200 ft)		0.5 km (0.3 mi)	1.3 km (0.8 mi)	245 m (800 ft)		2.3 km (1.4 mi)	5.0 km (3.1 mi)
3278	Organophosphorus compound, toxic, n.o.s. (when 'Inhalation Hazard' is on a package or shipping paper)								
3279	Organophosphorus compound, poisonous, flammable, n.o.s. (when 'Inhalation Hazard' is on a package or shipping paper)	60 m (200 ft)		0.5 km (0.3 mi)	1.3 km (0.8 mi)	245 m (800 ft)		2.3 km (1.4 mi)	5.0 km (3.1 mi)
3279	Organophosphorus compound, toxic, flammable, n.o.s. (when 'Inhalation Hazard' is on a package or shipping paper)								

TABLE OF WATER-REACTIVE MATERIALS WHICH PRODUCE TOXIC GASES

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

ID No.	Guide No.	Name of Material	TIH Gas(es) Produced
2978	166	Uranium hexafluoride, fissile excepted	HF
2978	166	Uranium hexafluoride, low specific activity	HF
2978	166	Uranium hexafluoride, non-fissile	HF
2985	155	Chlorosilanes, flammable, corrosive, n.o.s.	HCl
2985	155	Chlorosilanes, n.o.s.	HCl
2986	155	Chlorosilanes, corrosive, flammable, n.o.s.	HCl
2986	155	Chlorosilanes, n.o.s.	HCl
2987	156	Chlorosilanes, corrosive, n.o.s.	HCl
2987	156	Chlorosilanes, n.o.s.	HCl
2988	139	Chlorosilanes, n.o.s.	HCl
2988	139	Chlorosilanes, water-reactive, flammable, corrosive, n.o.s.	HCl
3048	157	Aluminum phosphide pesticide	PH ₃
3049	138	Metal alkyl halides, n.o.s.	HCl
3049	138	Metal alkyl halides, water-reactive, n.o.s.	HCl
3049	138	Metal aryl halides, n.o.s.	HCl
3049	138	Metal aryl halides, water-reactive, n.o.s.	HCl
3052	135	Aluminum alkyl halides	HCl
9191	143	Chlorine dioxide, hydrate, frozen	Cl ₂

Chemical Symbols for TIH Gases:

Br ₂	Bromine	HF	Hydrogen fluoride	PH ₃	Phosphine
Cl ₂	Chlorine	HI	Hydrogen iodide	SO ₂	Sulfur dioxide
HBr	Hydrogen bromide	H ₂ S	Hydrogen sulfide	SO ₂	Sulphur dioxide
HCl	Hydrogen chloride	H ₂ S	Hydrogen sulphide	SO ₃	Sulfur trioxide
HCN	Hydrogen cyanide	NH ₃	Ammonia	SO ₃	Sulphur trioxide

Use this list only when material is spilled in water.

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