

## Initial Isolation and Protective Action Distances (UN 1005-1556)

ID No.	NAME OF MATERIAL	<u>SMALL SPILLS</u>						<u>LARGE SPILLS</u>					
		(From a small package or small leak from a large package)						(From a large package or from many small packages)					
		First <u>ISOLATE</u> in all Directions		Then <u>PROTECT</u> persons Downwind during-				First <u>ISOLATE</u> in all Directions		Then <u>PROTECT</u> persons Downwind during-			
		<u>DAY</u>		<u>NIGHT</u>		<u>DAY</u>		<u>NIGHT</u>					
		m	(ft)	km	(mi)	km	(mi)	m	(ft)	km	(mi)	km	(mi)
1005	Ammonia, anhydrous	30	(100)	0.2	(0.1)	0.2	(0.1)	60	(200)	0.5	(0.3)	1.1	(0.7)
1005	Ammonia, anhydrous, liquefied	30	(100)	0.2	(0.1)	0.2	(0.1)	60	(200)	0.5	(0.3)	1.1	(0.7)
1005	Ammonia, solution, with more than 50% Ammonia	30	(100)	0.2	(0.1)	0.2	(0.1)	60	(200)	0.5	(0.3)	1.1	(0.7)
1005	Anhydrous ammonia	30	(100)	0.2	(0.1)	0.2	(0.1)	60	(200)	0.5	(0.3)	1.1	(0.7)
1005	Anhydrous ammonia, liquefied	30	(100)	0.2	(0.1)	0.2	(0.1)	60	(200)	0.5	(0.3)	1.1	(0.7)
1008	Boron trifluoride	30	(100)	0.2	(0.1)	0.6	(0.4)	215	(700)	1.6	(1.0)	5.1	(3.2)
1008	Boron trifluoride, compressed	30	(100)	0.2	(0.1)	0.6	(0.4)	215	(700)	1.6	(1.0)	5.1	(3.2)
1016	Carbon monoxide	30	(100)	0.2	(0.1)	0.2	(0.1)	125	(400)	0.6	(0.4)	1.8	(1.1)
1016	Carbon monoxide, compressed	30	(100)	0.2	(0.1)	0.2	(0.1)	125	(400)	0.6	(0.4)	1.8	(1.1)
1017	Chlorine	30	(100)	0.3	(0.2)	1.1	(0.7)	275	(900)	2.7	(1.7)	6.8	(4.2)
1023	Coal gas	30	(100)	0.2	(0.1)	0.2	(0.1)	60	(200)	0.3	(0.2)	0.5	(0.3)
1023	Coal gas, compressed	30	(100)	0.2	(0.1)	0.2	(0.1)	60	(200)	0.3	(0.2)	0.5	(0.3)
1026	Cyanogen	30	(100)	0.3	(0.2)	1.1	(0.7)	305	(1000)	3.1	(1.9)	7.7	(4.8)
1026	Cyanogen gas	30	(100)	0.3	(0.2)	1.1	(0.7)	305	(1000)	3.1	(1.9)	7.7	(4.8)
1026	Cyanogen, liquefied	30	(100)	0.3	(0.2)	1.1	(0.7)	305	(1000)	3.1	(1.9)	7.7	(4.8)
1040	Ethylene oxide	30	(100)	0.2	(0.1)	0.2	(0.1)	60	(200)	0.5	(0.3)	1.8	(1.1)
1040	Ethylene oxide with Nitrogen	30	(100)	0.2	(0.1)	0.2	(0.1)	60	(200)	0.5	(0.3)	1.8	(1.1)
1045	Fluorine	30	(100)	0.2	(0.1)	0.5	(0.3)	185	(600)	1.4	(0.9)	4.0	(2.5)
1045	Fluorine, compressed	30	(100)	0.2	(0.1)	0.5	(0.3)	185	(600)	1.4	(0.9)	4.0	(2.5)
1048	Hydrogen bromide, anhydrous	30	(100)	0.2	(0.1)	0.5	(0.3)	125	(400)	1.1	(0.7)	3.4	(2.1)
1050	Hydrogen chloride, anhydrous	30	(100)	0.2	(0.1)	0.6	(0.4)	185	(600)	1.6	(1.0)	4.3	(2.7)
1051	AC (when used as a weapon)	60	(200)	0.2	(0.1)	0.5	(0.3)	460	(1500)	1.6	(1.0)	3.9	(2.4)
1051	Hydrocyanic acid, aqueous solutions, with more than 20% Hydrogen cyanide	60	(200)	0.2	(0.1)	0.5	(0.3)	400	(1300)	1.3	(0.8)	3.4	(2.1)
1051	Hydrocyanic acid, liquefied	60	(200)	0.2	(0.1)	0.5	(0.3)	400	(1300)	1.3	(0.8)	3.4	(2.1)
1051	Hydrogen cyanide, anhydrous, stabilized	60	(200)	0.2	(0.1)	0.5	(0.3)	400	(1300)	1.3	(0.8)	3.4	(2.1)
1051	Hydrogen cyanide, stabilized	60	(200)	0.2	(0.1)	0.5	(0.3)	400	(1300)	1.3	(0.8)	3.4	(2.1)
1052	Hydrogen fluoride, anhydrous	30	(100)	0.2	(0.1)	0.6	(0.4)	125	(400)	1.1	(0.7)	2.9	(1.8)
1053	Hydrogen sulfide	30	(100)	0.2	(0.1)	0.3	(0.2)	215	(700)	1.4	(0.9)	4.3	(2.7)
1053	Hydrogen sulfide, liquefied	30	(100)	0.2	(0.1)	0.3	(0.2)	215	(700)	1.4	(0.9)	4.3	(2.7)
1053	Hydrogen sulphide	30	(100)	0.2	(0.1)	0.3	(0.2)	215	(700)	1.4	(0.9)	4.3	(2.7)
1053	Hydrogen sulphide, liquefied	30	(100)	0.2	(0.1)	0.3	(0.2)	215	(700)	1.4	(0.9)	4.3	(2.7)
1062	Methyl bromide	30	(100)	0.2	(0.1)	0.3	(0.2)	95	(300)	0.5	(0.3)	1.4	(0.9)
1064	Methyl mercaptan	30	(100)	0.2	(0.1)	0.3	(0.2)	95	(300)	0.8	(0.5)	2.7	(1.7)
1067	Dinitrogen tetroxide	30	(100)	0.2	(0.1)	0.5	(0.3)	305	(1000)	1.3	(0.8)	3.9	(2.4)
1067	Dinitrogen tetroxide, liquefied	30	(100)	0.2	(0.1)	0.5	(0.3)	305	(1000)	1.3	(0.8)	3.9	(2.4)
1067	Nitrogen dioxide	30	(100)	0.2	(0.1)	0.5	(0.3)	305	(1000)	1.3	(0.8)	3.9	(2.4)
1067	Nitrogen dioxide, liquefied	30	(100)	0.2	(0.1)	0.5	(0.3)	305	(1000)	1.3	(0.8)	3.9	(2.4)
1067	Nitrogen peroxide, liquid	30	(100)	0.2	(0.1)	0.5	(0.3)	305	(1000)	1.3	(0.8)	3.9	(2.4)
1067	Nitrogen tetroxide, liquid	30	(100)	0.2	(0.1)	0.5	(0.3)	305	(1000)	1.3	(0.8)	3.9	(2.4)
1069	Nitrosyl chloride	30	(100)	0.3	(0.2)	1.4	(0.9)	365	(1200)	3.5	(2.2)	9.8	(6.1)
1071	Oil gas	30	(100)	0.2	(0.1)	0.2	(0.1)	30	(100)	0.3	(0.2)	0.5	(0.3)
1071	Oil gas, compressed	30	(100)	0.2	(0.1)	0.2	(0.1)	30	(100)	0.3	(0.2)	0.5	(0.3)
1076	CG (when used as a weapon)	155	(500)	1.3	(0.8)	3.2	(2.0)	765	(2500)	7.2	(4.5)	11.0+	(7.0+)
1076	DP (when used as a weapon)	60	(200)	0.3	(0.2)	1.0	(0.6)	185	(600)	1.6	(1.0)	4.5	(2.8)
1076	Diphosgene	60	(200)	0.2	(0.1)	0.5	(0.3)	95	(300)	1.0	(0.6)	1.9	(1.2)
1076	Phosgene	95	(300)	0.8	(0.5)	2.7	(1.7)	765	(2500)	6.6	(4.1)	11.0	(6.9)
1079	Sulfur dioxide	30	(100)	0.3	(0.2)	1.1	(0.7)	185	(600)	3.1	(1.9)	7.2	(4.5)

1079 Sulfur dioxide, liquefied	30	(100)	0.3	(0.2)	1.1	(0.7)	185	(600)	3.1	(1.9)	7.2	(4.5)
1079 Sulphur dioxide	30	(100)	0.3	(0.2)	1.1	(0.7)	185	(600)	3.1	(1.9)	7.2	(4.5)
1079 Sulphur dioxide, liquefied	30	(100)	0.3	(0.2)	1.1	(0.7)	185	(600)	3.1	(1.9)	7.2	(4.5)
1082 Trifluorochloroethylene	30	(100)	0.2	(0.1)	0.2	(0.1)	30	(100)	0.3	(0.2)	0.8	(0.5)
1082 Trifluorochloroethylene, inhibited	30	(100)	0.2	(0.1)	0.2	(0.1)	30	(100)	0.3	(0.2)	0.8	(0.5)
1092 Acrolein, inhibited	60	(200)	0.5	(0.3)	1.6	(1.0)	400	(1300)	3.9	(2.4)	7.9	(4.9)
1098 Allyl alcohol	30	(100)	0.2	(0.1)	0.2	(0.1)	30	(100)	0.3	(0.2)	0.6	(0.4)
1135 Ethylene chlorohydrin	30	(100)	0.2	(0.1)	0.3	(0.2)	60	(200)	0.6	(0.4)	1.3	(0.8)
1143 Crotonaldehyde, inhibited	30	(100)	0.2	(0.1)	0.2	(0.1)	30	(100)	0.3	(0.2)	0.8	(0.5)
1143 Crotonaldehyde, stabilized	30	(100)	0.2	(0.1)	0.2	(0.1)	30	(100)	0.3	(0.2)	0.8	(0.5)
1162 Dimethyldichlorosilane (when spilled in water)	30	(100)	0.2	(0.1)	0.3	(0.2)	125	(400)	1.1	(0.7)	2.9	(1.8)
1163 1,1-Dimethylhydrazine	30	(100)	0.2	(0.1)	0.2	(0.1)	60	(200)	0.5	(0.3)	1.1	(0.7)
1163 Dimethylhydrazine, unsymmetrical	30	(100)	0.2	(0.1)	0.2	(0.1)	60	(200)	0.5	(0.3)	1.1	(0.7)
1182 Ethyl chloroformate	30	(100)	0.2	(0.1)	0.3	(0.2)	60	(200)	0.6	(0.4)	1.4	(0.9)
1185 Ethyleneimine, inhibited	30	(100)	0.3	(0.2)	0.8	(0.5)	155	(500)	1.4	(0.9)	3.5	(2.2)
1238 Methyl chloroformate	30	(100)	0.3	(0.2)	1.1	(0.7)	155	(500)	1.6	(1.0)	3.4	(2.1)
1239 Methyl chloromethyl ether	30	(100)	0.2	(0.1)	0.6	(0.4)	125	(400)	1.1	(0.7)	2.7	(1.7)
1242 Methylchlorosilane (when spilled in water)	30	(100)	0.2	(0.1)	0.2	(0.1)	60	(200)	0.5	(0.3)	1.6	(1.0)
1244 Methylhydrazine	30	(100)	0.3	(0.2)	0.8	(0.5)	125	(400)	1.1	(0.7)	2.7	(1.7)
1250 Methyltrichlorosilane (when spilled in water)	30	(100)	0.2	(0.1)	0.3	(0.2)	125	(400)	1.1	(0.7)	2.9	(1.8)
1251 Methyl vinyl ketone	155	(500)	1.3	(0.8)	3.4	(2.1)	915	(3000)	8.7	(5.4)	11.0+	(7.0+)
1251 Methyl vinyl ketone, stabilized	155	(500)	1.3	(0.8)	3.4	(2.1)	915	(3000)	8.7	(5.4)	11.0+	(7.0+)
1259 Nickel carbonyl	60	(200)	0.6	(0.4)	2.1	(1.3)	215	(700)	2.1	(1.3)	4.3	(2.7)
1295 Trichlorosilane (when spilled in water)	30	(100)	0.2	(0.1)	0.3	(0.2)	125	(400)	1.3	(0.8)	3.2	(2.0)
1298 Trimethylchlorosilane (when spilled in water)	30	(100)	0.2	(0.1)	0.2	(0.1)	95	(300)	0.8	(0.5)	2.3	(1.4)
1340 Phosphorus pentasulfide, free from yellow or white Phosphorus (when spilled in water)	30	(100)	0.2	(0.1)	0.5	(0.3)	155	(500)	1.3	(0.8)	3.2	(2.0)
1340 Phosphorus pentasulfide, free from yellow or white Phosphorus (when spilled in water)	30	(100)	0.2	(0.1)	0.5	(0.3)	155	(500)	1.3	(0.8)	3.2	(2.0)
1360 Calcium phosphide (when spilled in water)	30	(100)	0.2	(0.1)	0.8	(0.5)	215	(700)	2.1	(1.3)	5.3	(3.3)
1380 Pentaborane	155	(500)	1.3	(0.8)	3.7	(2.3)	765	(2500)	6.6	(4.1)	10.6	(6.6)
1384 Sodium dithionite (when spilled in water)	30	(100)	0.2	(0.1)	0.2	(0.1)	30	(100)	0.3	(0.2)	1.1	(0.7)
1384 Sodium hydrosulfite (when spilled in water)	30	(100)	0.2	(0.1)	0.2	(0.1)	30	(100)	0.3	(0.2)	1.1	(0.7)
1384 Sodium hydrosulphite (when spilled in water)	30	(100)	0.2	(0.1)	0.2	(0.1)	30	(100)	0.3	(0.2)	1.1	(0.7)
1397 Aluminum phosphide (when spilled in water)	30	(100)	0.2	(0.1)	0.8	(0.5)	245	(800)	2.4	(1.5)	6.4	(4.0)
1412 Lithium amide (when spilled in water)	30	(100)	0.2	(0.1)	0.2	(0.1)	95	(300)	0.8	(0.5)	1.9	(1.2)
1419 Magnesium aluminum phosphide (when spilled in water)	30	(100)	0.2	(0.1)	0.8	(0.5)	215	(700)	2.1	(1.3)	5.5	(3.4)
1432 Sodium phosphide (when spilled in water)	30	(100)	0.2	(0.1)	0.5	(0.3)	155	(500)	1.4	(0.9)	4.0	(2.5)
1433 Stannic phosphides (when spilled in water)	30	(100)	0.2	(0.1)	0.8	(0.5)	185	(600)	1.6	(1.0)	4.7	(2.9)
1510 Tetranitromethane	30	(100)	0.3	(0.2)	0.5	(0.3)	60	(200)	0.6	(0.4)	1.3	(0.8)
1541 Acetone cyanohydrin, stabilized (when spilled in water)	30	(100)	0.2	(0.1)	0.2	(0.1)	95	(300)	0.8	(0.5)	2.1	(1.3)
1556 MD (when used as a weapon)	30	(100)	0.3	(0.2)	0.8	(0.5)	125	(400)	1.3	(0.8)	3.5	(2.2)
1556 Methylchloroarsine	30	(100)	0.2	(0.1)	0.3	(0.2)	60	(200)	0.5	(0.3)	1.0	(0.6)
1556 PD (when used as a weapon)	30	(100)	0.2	(0.1)	0.2	(0.1)	30	(100)	0.2	(0.1)	0.3	(0.2)