



CHEMICAL CLASSIFIERS	
Chemical Risk	Limits of Sensitivity
Acid or Base/Alkaline	(pH) 0-13
Oxidizers	1 mg/L (1 ppm)
Fluoride	20 mg/L (20 ppm)
Petroleum Product/	
Organic Solvent	10 mg/L (10 ppm)
Iodine/Chlorine/Bromine	1 mg/L (1 ppm)

KOLOR-SAFE® LIQUID ACID NEUTRALIZATION GUIDE						
Chemical ▼	Concentration		Volume (0.95 Ltr Neutralizes)		Approx. Amount Required To Handle 1 Gal. (3.785l) Acid Spill	
	% by Wgt	Molarity	Pints	Liters	Gallons	Liters
Sulfuric (H ₂ SO ₄)	98	18	0.27	0.14	7.3	27.7
	50	9.2	0.55	0.26	3.7	14
	10	1.8	2.71	1.28	0.9	2.8
Nitric (HN0 ₃)	68	15.8	0.61	0.29	3.2	12.2
	40	9.3	1.06	0.5	1.9	7.2
	10	2.3	4.31	2.04	0.5	1.8
Acetic (CH ₃ COOH)	100	17.5	0.55	0.26	3.6	13.7
	78	13.7	0.72	0.34	2.8	10.6
	40	7	1.44	0.68	1.4	5.3
Phosphoric (H ₃ PO ₄)	85	14.6	0.23	0.11	8.8	33.3
	40	6.9	0.49	0.23	4.2	15.9
	10	1.7	1.82	0.86	1.1	4.2
Hydrochloric (HCL)	40	12	0.82	0.39	2.4	9.1
	20	6	1.65	0.78	1.2	4.6
	10	3	3.30	1.56	0.6	2.3

KOLOR-SAFE® DRY ACID NEUTRALIZATION GUIDE						
Chemical ▼	Concentration		Volume (900 gr Neutralizes)		Approx. Amount Required To Handle 1 Gal. (3.785l) Acid Spill	
	% by Wgt	Molarity	Pints	Liters	Lbs.	Kg
Sulfuric (H ₂ SO ₄)	98	18	0.99	0.47	16.1	7.3
	50	9.2	1.96	0.93	8.1	3.7
	10	1.8	10.03	4.75	1.6	0.7
Nitric (HN0 ₃)	68	15.8	2.28	1.08	7	3.2
	40	9.3	3.88	1.84	4.1	1.9
	10	2.3	15.72	7.44	1	0.5
Acetic (CH ₃ COOH)	100	17.5	2.04	0.97	7.8	3.5
	78	13.7	2.62	1.24	6.1	2.8
	40	7	5.15	2.44	3.1	1.4
Phosphoric (H ₃ PO ₄)	85	14.6	0.82	0.39	19.4	8.8
	40	6.9	1.73	0.82	9.2	4.2
	10	1.7	7.07	3.35	2.3	1
Hydrochloric (HCL)	40	12	3	1.42	5.3	2.4
	20	6	6.02	2.85	2.7	1.2
	10	3	12.04	5.7	1.3	0.6

KOLOR-SAFE® LIQUID BASE/ALKALINE NEUTRALIZATION GUIDE						
Chemical ▼	Concentration		Volume (0.95 Ltr Neutralizes)		Approx. Amount Required To Handle 1 Gal. (3.785l) Base Spill	
	% by Wgt	Molarity	Pints	Liters	Gallons	Liters
Ammonium Hydroxide (NH ₄ OH)	61.7 (30% NH ₃)	14.8	1.11	0.52	1.8	6.9
	42.2 (20% NH ₃)	9.8	1.66	0.78	1.2	4.6
	20.6 (10% NH ₃)	4.9	3.33	1.57	0.6	2.3
Potassium Hydroxide (KOH)	10.3 (5% NH ₃)	2.4	6.65	3.15	0.3	1.2
	50	13.4	1.24	0.59	1.6	6.1
	40	10.7	1.53	0.72	1.3	5
Sodium Hydroxide (NaOH)	20	5.3	2.85	1.35	0.7	2.7
	10	2.6	6.65	3.15	0.3	1.2
	50	19.2	0.86	0.41	2.3	8.8
Hydroxide (NaOH)	40	15.3	1.05	0.49	2	7.6
	30	11.5	1.42	0.67	1.5	5.7
	10	3.8	3.99	1.89	0.5	1.9
	10	3	3.71	1.76	0.6	2.3

KOLOR-SAFE® DRY BASE/ALKALINE NEUTRALIZATION GUIDE						
Chemical ▼	Concentration		Volume (0.95 gr. Neutralizes)		Approx. Amount Required To Handle 1 Gal. (3.785l) Base Spill	
	% by Wgt	Molarity	Pints	Liters	Lbs.	Kg
Ammonium Hydroxide (NH ₄ OH)	61.7 (30% NH ₃)	14.8	2	0.95	8	3.6
	42.2 (20% NH ₃)	9.8	3.04	1.44	5.3	2.4
	20.6 (10% NH ₃)	4.9	6.08	2.88	2.6	1.2
Potassium Hydroxide (KOH)	10.3 (5% NH ₃)	2.4	12.46	5.9	1.3	0.6
	50	13.4	2.21	1.05	7.2	3.3
	40	10.7	2.78	1.32	5.6	2.6
Sodium Hydroxide (NaOH)	20	5.3	5.64	2.67	2.8	1.3
	10	2.6	11.49	5.44	1.4	0.6
	50	19.2	1.54	0.73	10.4	4.7
Hydroxide (NaOH)	40	15.3	1.94	0.92	8.3	3.8
	30	11.5	2.59	1.23	6.2	2.8
	10	3.8	7.86	3.72	2	0.9
	10	3	12.04	5.7	1.3	0.6