

Chemical Resistance Guide for Concrete

Ambient temperature and maximum concentration apply, unless otherwise noted.

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	CS2	CS4	EG-1	791	797	988	NVE VC	NVE		CS2	CS4	EG-1	791	797	988	NVE VC	NVE
A Acetic Acid (Glacial) [CH ₃ COOH]	4	4	4	4	4	4	1	1	C Carbon Dioxide (dry) [CO ₂]	1	1	1	1	1	1	1	1
Acetic Acid (10%) [CH ₃ COOH]	4	3	4	4	4	4	1	1	Carbonic Acid (dry) [H ₂ CO ₃]	1	1	1	1	1	1	1	1
Acetic Acid (5%) [CH ₃ COOH]	4	2	4	4	4	3	1	1	Chlorine Dioxide (12%) [ClO ₂]	4	2	3	3	3	2	1	1
Acetone [CH ₃ COCH ₃]	4	4	4	4	4	3	2	2	Chrome Alum [KCr(SO ₄) ₂ ·12H ₂ O]	1	1	1	1	1	1	1	1
Aluminum Chloride (dry) [AlCl ₃]	1	1	1	1	1	1	1	1	Chromic Acid (20%) [H ₂ Cr ₂ O ₇]	4	3	4	4	4	3	2	2
Aluminum Sulfate (alum, dry) [Al ₂ (SO ₄) ₃]	1	1	1	1	1	1	1	1	Chromic Acid (10%) [H ₂ Cr ₂ O ₇]	4	2	3	3	3	2	1	1
Ammonia Anhydrous [NH ₃]	1	1	1	1	1	1	1	1	Citric Acid (50%) [C ₆ H ₈ O ₇]	4	4	4	4	4	4	1	1
Ammonium Bicarbonate (dry) [NH ₄ HCO ₃]	1	1	1	1	1	1	1	1	Citric Acid (20%) [C ₆ H ₈ O ₇]	3	1	2	2	2	1	1	1
Ammonium Carbonate (dry) [(NH ₄) ₂ CO ₃]	1	1	1	1	1	1	1	1	Cupric Acetate (dry) [Cu(C ₂ H ₃ O ₂) ₂]	1	1	1	1	1	1	1	1
Ammonium Chloride (dry) [NH ₄ Cl]	1	1	1	1	1	1	1	1	Cuprous Chloride (dry) [CuCl]	1	1	1	1	1	1	1	1
Ammonium Hydroxide (28%) [NH ₄ OH]	2	1	1	1	1	1	1	1	Cupric Nitrate (dry) [Cu(NO ₃) ₂]	1	1	1	1	1	1	1	1
Ammonium Monophosphate [(NH ₄)H ₂ PO ₄]	1	1	1	1	1	1	1	1	Cupric Sulfate (dry) [CuSO ₄]	1	1	1	1	1	1	1	1
Ammonium Nitrate (dry) [NH ₄ NO ₃]	1	1	1	1	1	1	1	1	D Deionized Water [H ₂ O]	1	1	1	1	1	1	1	1
Ammonium Sulfate (dry) [(NH ₄) ₂ SO ₄]	1	1	1	1	1	1	1	1	Dibutyl Adipate (dry) [C ₁₄ H ₂₆ O ₄]	1	1	1	1	1	1	1	1
Aqua Regia [(HNO ₃)/3(HCl)]	4	4	4	4	4	3	1	1	Dibutyl Phthalate (dry) [C ₁₆ H ₂₂ O ₄]	1	1	1	1	1	1	1	1
Aviation Fuel	1	1	1	1	1	1	1	1	Dibutyl Sebacate (dry) [C ₁₈ H ₃₄ O ₄]	1	1	1	1	1	1	1	1
B Barium Carbonate (dry) [BaCO ₃]	1	1	1	1	1	1	1	1	Diesel Fuel	1	1	1	1	1	1	1	1
Barium Chloride (dry) [BaCl ₂]	1	1	1	1	1	1	1	1	Diethanolamine [C ₄ H ₁₁ O ₂ N]	4	2	3	3	3	1	2	2
Barium Hydroxide (dry) [Ba(OH) ₂]	1	1	1	1	1	1	1	1	Diethylamine [C ₄ H ₁₁ N]	4	2	2	2	2	1	2	2
Barium Sulfate (dry) [BaSO ₄]	1	1	1	1	1	1	1	1	Diethyl Phthalate (dry) [C ₂₄ H ₄₀ O ₄]	1	1	1	1	1	1	1	1
Beer	1	1	1	1	1	1	1	1	Diethyl Sebacate (dry) [C ₂₆ H ₅₂ O ₄]	1	1	1	1	1	1	1	1
Beet Sugar [C ₁₂ H ₂₂ O ₁₁]	1	1	1	1	1	1	1	1	E Epsom Salt [MgSO ₄ ·7H ₂ O]	1	1	1	1	1	1	1	1
Benzene [C ₆ H ₆]	4	4	3	3	3	2	2	1	Ethanol [CH ₃ CH ₂ OH]	4	3	3	3	3	1	1	1
Black Liquor	2	1	1	1	1	1	1	1	Ethylene Chloride [CH ₃ CH ₂ Cl]	4	3	4	4	4	3	2	2
Brine	1	1	1	1	1	1	1	1	Ethylene Dichloride [ClCH ₂ CH ₂ Cl]	4	3	4	4	4	3	2	2
Bunker C	1	1	1	1	1	1	1	1	Ethylene Glycol [HOCH ₂ CH ₂ OH]	1	1	1	1	1	1	1	1
C Calcium Bisulfite (dry) [Ca(HSO ₃) ₂]	3	1	1	1	1	1	1	1	Ethylene Oxide [C ₂ H ₄ O]	4	3	4	4	4	3	2	2
Calcium Carbonate (dry) [CaCO ₃]	1	1	1	1	1	1	1	1	F Ferric Chloride (dry) [FeCl ₃]	2	1	1	1	1	1	1	1
Calcium Chloride (dry) [CaCl ₂]	1	1	1	1	1	1	1	1	Ferric Chloride (50%) [FeCl ₃]	2	1	2	2	2	1	1	1
Calcium Hydroxide (dry) [Ca(OH) ₂]	1	1	1	1	1	1	1	1	Ferric Nitrate [Fe(NO ₃) ₃]	3	1	1	1	1	1	1	1
Calcium Sulfate (dry) [CaSO ₄]	1	1	1	1	1	1	1	1	Ferric Sulfate [Fe ₂ (SO ₄) ₃]	3	1	1	1	1	1	1	1
Cane Sugar [C ₁₂ H ₂₂ O ₁₁]	1	1	1	1	1	1	1	1	Ferrous Chloride (100%,dry) [FeCl ₂]	2	1	1	1	1	1	1	1

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F Ferrous Nitrate (dry) [Fe(NO3)2]	2	1	1	1	1	1	1	1
Ferrous Sulfate (dry) [FeSO4]	2	1	1	1	1	1	1	1
Fluosilicic Acid (20%) [H2SiF6]	4	3	3	3	3	2	1	1
Fluosilicic Acid (10%) [H2SiF6]	4	2	2	2	2	1	1	1
Formaldehyde (35%) [CH2O]	3	1	1	1	1	1	1	1
Formic Acid (50%) [CH2O2]	4	4	4	4	4	4	1	1
Formic Acid (10%) [CH2O2]	4	3	4	4	4	4	1	1
G Gasoline [C7H16/C10H22]	1	1	1	1	1	1	1	1
Glucose [C6H12O6]	1	1	1	1	1	1	1	1
Green/White Liquor	2	1	1	1	1	1	1	1
H Heptane [C7H16]	1	1	1	1	1	1	1	1
Hexane [C6H14]	1	1	1	1	1	1	1	1
Hydrochloric Acid (37%) [HCl]	4	3	3	3	3	1	1	1
Hydrochloric Acid (10%) [HCl]	1	1	1	1	1	1	1	1
Hydrofluoric Acid (10%) [HF]	3	2	3	3	3	2	1	1
Hydrogen Peroxide (50%) [H2O2]	4	4	4	4	4	3	2	2
Hydrogen Peroxide (10%) [H2O2]	4	3	3	3	3	2	1	1
Hydrogen Peroxide (3%) [H2O2]	3	1	2	2	2	1	1	1
Hydrogen Sulfide (wet) [H2S]	3	1	1	1	1	1	1	1
I Iso-Octane [C8H18]	2	1	1	1	1	1	1	1
Isopropyl Alcohol [C3H8O]	1	1	1	1	1	1	1	1
J Jet Fuel (JP-5)	1	1	1	1	1	1	1	1
K Kerosene	1	1	1	1	1	1	1	1
L Lactic Acid (10%) [C3H6O3]	4	2	4	4	4	3	1	1
Lead Acetate [Pb(CH3COO)2]	2	1	1	1	1	1	1	1
Lime Water [Ca(OH)2/H2O]	1	1	1	1	1	1	1	1
M Magnesium Bisulfate (dry) [Mg(HSO4)2]	1	1	1	1	1	1	1	1
Magnesium Chloride (dry) [MgCl2]	1	1	1	1	1	1	1	1
Magnesium Sulfate (dry) [MgSO4]	1	1	1	1	1	1	1	1
Maleic Acid (30%) [C4H4O4]	3	1	2	2	2	1	1	1
Mercuric Chloride (dry) [HgCl2]	1	1	1	1	1	1	1	1
Mercury [Hg]	1	1	1	1	1	1	1	1

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M Methane [CH4]	1	1	1	1	1	1	1	1
Methanol [CH3OH]	4	3	3	3	3	2	1	1
Methylamine [CH3NH2]	4	2	3	3	3	1	2	2
MEK [C4H8O]	4	4	4	4	4	3	1	1
Methylene Chloride [CH2Cl2]	4	3	4	4	4	3	2	2
MIBK [C6H12O]	3	2	3	3	3	2	1	1
Mineral Spirits	1	1	1	1	1	1	2	2
Monoethanolamine [H2NCH2CH2OH]	3	2	3	3	3	2	1	1
N Naphtha	1	1	1	1	1	1	1	1
Nickel Ammonium Sulfate (dry) [NiNH4SO4]	2	1	1	1	1	1	1	1
Nickel Chloride (dry) [NiCl2]	2	1	1	1	1	1	1	1
Nickel Nitrate (dry) [Ni(NO3)2]	2	1	1	1	1	1	1	1
Nickel Sulfate (dry) [NiSO4]	3	1	1	1	1	1	1	1
Nitric Acid (70%) [HNO3]	4	4	4	4	4	4	2	2
Nitric Acid (40%) [HNO3]	4	4	4	4	4	4	1	1
Nitric Acid (20%) [HNO3]	4	3	3	3	3	1	1	1
Nitric Acid (10%) [HNO3]	4	2	2	2	2	1	1	1
Nitrogen [N2]	1	1	1	1	1	1	1	1
O Oleic Acid [C18H34O2]	4	1	4	4	4	2	1	1
Ozone 0.5 ppm [O3]	4	2	3	3	3	2	1	1
Oleum [fuming H2SO4]	4	2	4	4	4	3	4	4
P Palmitic Acid [CH3(CH2)14COOH]	4	2	3	3	3	2	1	1
Paraffin Wax	1	1	1	1	1	1	1	1
Pentane [C5H12]	1	1	1	1	1	1	1	1
Phenol (Carbolic Acid) [C6H6O]	4	3	4	4	4	3	2	2
Phosphoric Acid (85%) [H3PO4]	4	4	4	4	4	1	1	1
Phosphoric Acid (50%) [H3PO4]	4	4	3	3	3	1	1	1
Phosphoric Acid (30%) [H3PO4]	4	2	2	2	2	1	1	1
Phosphoric Acid (10%) [H3PO4]	1	1	1	1	1	1	1	1
Pickle Brine (2 – 4% Acetic Acid)	4	2	4	4	4	3	1	1
Potash Alum (dry) [AlK08S2]	1	1	1	1	1	1	1	1
Potassium Bicarbonate (dry) [KHCO3]	1	1	1	1	1	1	1	1

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Potassium Bisulfate (dry) [KHSO ₄]	1	1	1	1	1	1	1	1	Sodium Fluoride (dry) [NaF]	2	1	1	1	1	1	1	1
P Potassium Bromide (30%) [KBr]	1	1	1	1	1	1	1	1	S Sodium Hydroxide (50%) [NaOH]	2	1	2	2	2	1	1	1
Potassium Carbonate (50%) [K ₂ CO ₃]	1	1	1	1	1	1	1	1	Sodium Hydroxide (10%) [NaOH]	1	1	1	1	1	1	1	1
Potassium Chloride (30%) [KCl]	1	1	1	1	1	1	1	1	Sodium Hypochlorite (15%) [NaClO]	4	3	4	4	4	3	2	2
Potassium Cyanide (dry) [KCN]	2	1	2	2	2	2	1	1	Sodium Hypochlorite (6%) [NaClO]	2	1	1	1	1	1	1	1
Potassium Dichromate (dry) [K ₂ Cr ₂ O ₇]	2	1	2	2	2	1	1	1	Sodium Metaphosphate (dry) [(NaPO ₃) _n]	2	1	1	1	1	1	1	1
Potassium Phosphate Dibasic (dry) [K ₂ HPO ₄]	3	1	2	2	2	1	1	1	Sodium Metasilicate (dry) [Na ₂ SiO ₃]	2	1	1	1	1	1	1	1
Potassium Ferricyanide (dry) [K ₃ Fe(CN) ₆]	2	1	2	2	2	1	1	1	Sodium Nitrate (dry) [NaNO ₃]	1	1	1	1	1	1	1	1
Potassium Ferrocyanide (dry) [K ₄ Fe(CN) ₆]	2	1	2	2	2	1	1	1	Sodium Phosphate Acid [NaH ₂ PO ₄]	2	1	2	2	2	1	1	1
Potassium Hydroxide (50%) [KOH]	2	1	1	1	1	1	1	1	Sodium Silicate (dry) [Na ₂ SiO ₃]	1	1	1	1	1	1	1	1
Potassium Hydroxide (10%) [KOH]	1	1	1	1	1	1	1	1	Sodium Sulfate (dry) [Na ₂ SO ₄]	1	1	1	1	1	1	1	1
Potassium Iodide [KI]	1	1	1	1	1	1	1	1	Sodium Sulfite (dry) [Na ₂ SO ₃]	1	1	1	1	1	1	1	1
Potassium Nitrate (dry) [KNO ₃]	1	1	1	1	1	1	1	1	Stannic Chloride (dry) [SnCl ₄]	1	1	1	1	1	1	1	1
Potassium Permanganate [KMnO ₄]	3	1	2	2	2	1	1	1	Starch [C ₆ H ₁₂ O ₆] _n	1	1	1	1	1	1	1	1
Propylene Oxide [C ₃ H ₆ O]	3	2	3	3	3	2	2	2	Sulfuric Acid (98%) [H ₂ SO ₄]	4	1	4	4	4	1	4	4
S Salt Water [NaCl+H ₂ O+minerals]	1	1	1	1	1	1	1	1	Sulfuric Acid (70%) [H ₂ SO ₄]	4	1	4	4	4	1	1	1
Sewage	1	1	1	1	1	1	1	1	Sulfuric Acid (30%) [H ₂ SO ₄]	1	1	1	1	1	1	1	1
Silicone Oil	1	1	1	1	1	1	1	1	Sulfuric Acid (10%) [H ₂ SO ₄]	1	1	1	1	1	1	1	1
Silver Nitrate [AgNO ₃]	1	1	1	1	1	1	1	1	Sulfur Dioxide [SO ₂]	1	1	1	1	1	1	1	1
Skydrol [aircraft hydraulic fluid]	1	1	1	1	1	1	1	1	T Tar	1	1	1	1	1	1	1	1
Sodium Acetate [CH ₃ COONa]	1	1	1	1	1	1	1	1	Toluene [C ₇ H ₈]	4	4	2	2	2	1	1	1
Sodium Aluminate [AlNaO ₂]	1	1	1	1	1	1	1	1	Transformer Oil	1	1	1	1	1	1	1	1
Sodium Bicarbonate [NaHCO ₃]	1	1	1	1	1	1	1	1	Turpentine [C ₁₀ H ₁₆]	2	1	1	1	1	1	1	1
Sodium Bisulfate [NaHSO ₄]	1	1	1	1	1	1	1	1	U Urea (dry) [H ₂ NCONH ₂]	1	1	1	1	1	1	1	1
Sodium Bisulfite [Na ₂ S ₂ O ₅]	1	1	1	1	1	1	1	1	Urea (30%) [H ₂ NCONH ₂]	1	1	1	1	1	1	1	1
Sodium Borate [Na ₂ B ₄ O ₇]	1	1	1	1	1	1	1	1	V Vegetable Oil	1	1	1	1	1	1	1	1
Sodium Bromide [NaBr]	1	1	1	1	1	1	1	1	Vinegar (4 – 8% Acetic Acid)	4	2	4	4	4	3	1	1
Sodium Carbonate [Na ₂ CO ₃]	1	1	1	1	1	1	1	1	W Wine (7 – 20% Ethanol)	2	1	2	2	2	1	1	1
Sodium Chlorate (dry) [NaClO ₃]	1	1	1	1	1	1	1	1	X Xylene [C ₆ H ₄ (CH ₃) ₂]	2	1	1	1	1	1	1	1
Sodium Chloride (dry) [NaCl]	1	1	1	1	1	1	1	1	Z Zinc Chloride (dry) [ZnCl ₂]	1	1	1	1	1	1	1	1
Sodium Chromate [Na ₂ CrO ₄]	2	1	2	2	2	1	1	1	Zinc Hydrosulfite (dry) [Zn(HSO ₃) ₂]	1	1	1	1	1	1	1	1
Sodium Cyanide (dry) [NaCN]	1	1	1	1	1	1	1	1	Zinc Sulfate (dry) [ZnSO ₄]	1	1	1	1	1	1	1	1