SPARTACOTE® Chemical Resistance

US Patents: 6.833,424 & 7,169,876

Chemical Resistance Data

Material	No Effect	Slight Effect	Not Recommended
Acetic Acid			
Acetic Acid 25%		x	
Acetone		x	
Ammonium Hydroxide: 10%	x		
Ammonia: 20%	x		
Antifreeze	x		
Brake Fluid	x		
Chlorinated Pool Water (pH 6.5)	x		
Chromic Acid		x	
Citric Acid 25%	x		
Clorox: 20%	x		
Coffee	x		
Cola	x		
Commercial Paint Remover			x
Diesel Fuel	x		
Ethyl Alcohol: 50%	x		
Formaldehyde	x		
Gasoline	x		
Hydraulic Fluid	x		
Hydrochloric Acid 20%	x		
Hydrogen Peroxide 30%		x	
Isopropanol Alcohol	x		
Jet Fuel	x		
Lactic Acid 25%	x		
Methyl Ethyl Ketone			x
Mineral Oil	x		
Mineral Spirits	x		
Motor Oil	x		
Motor Oil	x		
Muratic Acid: 10%	x		
Nitric Acid 5%	x		
Paint Thinner (Aliphatic Hydrocarbon)	x		
Phosphoric Acid	x		
PM Solvent		x	
Potassium Hydroxide		x	
Propylene Glycol	x		
Quadry Ammonia: 20%	x		
Skydrol B	x		
Sodium Hydroxide: 50%	x		
Sulfuric Acid: 10%	x		
Tannic Acid 20%	x		
Trisodium Phosphate 5%	x		
Vinegar	x		
Xylene		x	

** Chemical resistance reflects patented Spartacote® HIgh Performance concrete coatings following minimum cure time of 18 days.*

Performance Comparisons.

Cured Floor Coatings Comparison

Epoxy vs. Polyurethane vs. SPARTACOTE® Polyaspartic

Property	ASTM Method	2-Part Epoxy	Aliphatic PUR	SPARTACOTE®	Spartacote® Advantage
Abrasion Resistance	D-4060 (a) mg loss	83-105	60-65	22-28	Triple the Abrasion Resistance
Falling Sand Abrasion	D-968 (b) liters sand/mil	8-10(c)	25-30 (c)	30-38	Triple the Wear Resistance
Adhesion Pull-Off	D-4541, psi concrete failure, psi over steel	400 400-600	400 NR (d)	400 1,000	Twice the Adhesion to Steel
Tensile Strength	D-638, D-2370 psi	3,339- 4,000	4,400-5,500	4,500 - 5,000	Equal
Impact Direct/Reverse	D-2794 inch pounds	40/20	80/40	160/160	40% - 50% Chip Reduction
Flexibility 1/8” Mandrel	D-522 Cracking	Fails	Passes	Passes	50% greater flexibility and Chip Reduction
Color-Gloss Retention - SSPC Paint Specification No. 36					
48 Months S. Florida	D-1014 meets	Level 1 Fails	Level 2	Level 3	Twice the Color and Gloss Retention
2,000 Hrs. Accelerated	D-4587 meets	Level 1 Fails	Level 2	Level 3	Twice the Color and Gloss Retention
Re-Coat Time or Walk-On Foot Traffic - Above 70ºF, Below 80% Relative Humidity					
Minimum / Maximum Re-Coat Hrs.		3-4 / 48	5 / 36	1.48	2- Days
Minimum Foot Traffic-Hrs.		12-16	24	2	2-Days

(a) CS-17 Taber Abrasion Wheel, 1,000 gram load; 1,000 revolutions
(b) Liters of sand to erode 1 dry mil coating
(c) Average of generic coatings surveyed
(d) NR - Not Recommended

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