



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 (pH6.5)	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-Pack 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 70°F, 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

