



Wearing Compounds

Technical Information



Physical Properties	Wear Guard™ High Load	Wear Guard™ High Temp	Wear Guard™ High Impact	Wear Guard™ Fine Load	Combo Wear FC (Fast Cure)	Brushable Ceramic	Backing Compound	High Performance Backing Compound	Tile Adhesive	Carbide Putty
Color	Grey	Grey	Dark Grey	Grey	Grey	Red, Blue	Green / Brown	Red	Light Grey	Grey
Mix ratio by weight / volume <i>(resin:hardener)</i>	2:1 / 2:1	13.7:1 / 6:1	2.5:1	2:1 / 2:1	2:1 / 2:1	5.6:1 / 3.4:1	100:6.84 / 9:1	100:5.94 / 9.9:1	1.1:1 / 1:1	8:1 / 4:1
Mixed viscosity cps	Putty	Putty	Putty	Putty	Putty	32,000	4700	10,320	Putty	Putty
Functional cure hours	16	Heat Cured	16	16	8	16	8	8	12	16
Pot life minutes @ 75 °F	45	120	45	45	7	40	15	56	240	50
Specific volume <i>inches³/pound</i>	12.9	15.1	12.4	12.4	12.4	16.5	17.2	17.2	19.2	15.9
Coverage per pound <i>inches² @ 1/4" thickness</i>	50	60	50	50	50	7.6 ³	349 ¹	349 ²	76.8	64
Cured hardness (ASTM D2240) Shore D	87	87	85	87	87	90	92	92	81	85
Cured shrinkage (ASTM D2566) inch/inch	0.0006	0.0010	0.0006	0.0014	0.0005	0.0020	0.0010	0.0006	0.0010	0.0009
Adhesive tensile shear (ASTM D1002) psi	1,375	2,300	2,567	1,375	1,450	2,000	2,000	2,000	2,890	1,350
Tensile strength (ASTM D638) psi	4,210	4,600	4,220	4,300	4,300	3,800	5,497	7,687	2,640	2,640
Compressive strength (ASTM D695) psi	11,000	13,200	7,250	11,000	11,000	15,200	13,880	18,850	9,620	8,160
Flexural strength (ASTM D790) psi	7,140	8,220	6,144	7,190	7,140	8,000	8,558	11,500	5,480	5,480
Modulus of elasticity (ASTM D638) psi x 10³	8.5	8.5	3.36	8.5	8.0	9.0	9.2	9.5	8.0	8.0
Coefficient of thermal expansion (ASTM D696) <i>[(in)/(in x °F)] x 10⁻³</i>	32	27	34	34	34	19	22	22	14	14
Thermal conductivity (ASTM C177) <i>[(cal x cm)/(sec x cm² x °C)] x 10⁻³</i>	1.75	2.14	1.81	1.81	1.75	1.92	N / A	N / A	1.25	1.25
Dielectric constant (ASTM D150) 1 KHz	41.0	38.0	46.0	46.0	41.0	38.7	N / A	N / A	46.0	25.0
Dielectric strength (ASTM D149) volts/mil	340	310	340	340	340	382	N / A	N / A	320	200
Maximum continuous service temperature °F dry	300	450	300	300	300	350	250	250	200	250

Notes: ¹ Coverage / 20.3 pound unit (inches)² Coverage / 20.4 pound unit (inches)³ Coverage (feet² @ 15 mils)

Key: ● Excellent ○ Very Good ○ Fair ○ Poor

Chemical Resistance	Wear Guard™ High Load	Wear Guard™ High Temp	Wear Guard™ High Impact	Wear Guard™ Fine Load	Combo Wear FC (Fast Cure)	Brushable Ceramic	Backing Compound	High Performance Backing Compound	Tile Adhesive	Carbide Putty
ACIDS										
Acetic 10%	○	○	○	○	○	○	○	○	○	○
Hydrochloric 10%	●	●	●	●	●	●	●	●	●	○
Sulfuric 10%	●	●	●	●	●	●	○	○	●	○
ALCOHOLS										
Methanol	○	○	○	○	○	●	○	○	○	○
Isopropanol	○	○	○	○	○	●	○	○	○	○
KETONES										
Acetone	○	○	○	○	○	○	○	○	○	○
Methyl ethyl ketone	○	○	○	○	●	○	○	○	●	○
ALKALIS										
Ammonium hydroxide 20%	●	●	●	●	●	●	●	●	●	●
Sodium hydroxide 10%	●	●	●	●	●	●	●	●	●	●
HYDROCARBONS										
Gasoline (unleaded)	●	●	●	●	○	●	●	●	○	●
Mineral spirits	●	●	●	●	●	●	●	●	●	●
CHLORINATED HYDROCARBONS										
Perchloroethylene	○	●	○	○	○	●	○	○	○	○
1-1-1 Trichloroethane	○	●	○	○	○	●	○	○	○	○
SALTS										
Sodium chloride	○	●	○	○	○	●	●	●	○	○
Trisodium phosphate	○	●	○	○	○	●	●	●	○	○