

Wear Compounds

C.L. Smith Industrial Company offers a family of wear compounds that have proven to last extended periods in many applications even though they are generally considered a short term solution. The abrasion and corrosion resistant compounds start off with our specially formulated epoxies and are loaded with alumina ceramic or silicon carbide beads suspended in the epoxy resin. They provide excellent protection for use in chutes, elbows, cones and other material processing equipment.



CLS-101 Fast Set is based on CLS-70-4 epoxy loaded with **ceramic** beads

CLS-202 Regular Set is based on CLS-773 epoxy loaded with **ceramic** beads

CLS-303 Regular Set is based on CLS-773 epoxy loaded with **silicon carbide** beads

CLS-404 Heat Resistant is based on CLS-63 epoxy loaded with **ceramic** beads

CLS-505 Heat Resistant is based on CLS-63 epoxy loaded with **silicon carbide** beads

CLS-1100 High Temperature is a custom formula loaded with **micro ceramic** beads

Specialty Items

With custom solutions at the forefront of addressing everyday erosion and corrosion problems we continuously look for ways to incorporate those products initially designed for a very specific application into our family of adhesives and wear compounds

CLS-808 Brushable Ceramic is a brushable epoxy coating blended with abrasion resistant ceramic fillers to provide a durable protective barrier. CLS-808 low odor, contains no VOC's or solvents, is waterproof and resistant to most chemicals and solvents. With a thick creamy paste consistency it is easy to apply by brush to most surfaces and allows for vertical and overhead application. Multiple colors available for creating layered surface wear indicators. Ideal for use on;

- Mixing vessels
- Pump casings
- Grain Bins
- Cyclones
- Wear plates
- Fan and impeller blades
- Hoppers and chutes
- Pneumatic conveyors Grain Bins
- Dust collection systems
- Augers and troughs
- Brick corners and transition areas
- Piping, elbows, laterals



CLS-909 High Impact is a flexibilized epoxy gel blended with abrasion resistant ceramic beads to provide a high-impact resistant, asphalt looking surface where severe wear and impact are problematic. **CLS-909** is waterproof and resistant to most solvents and chemicals. The thick non-sag paste consistency will allow for vertical and overhead patching and by building up multiple layers thickness can exceed 1 inch. Ideal for use on the same applications as **CLS-808**

CLS-1201 is a high solids steel filled matrix for repair of worn steel surfaces and components. **CLS-1201** is waterproof and contains no VOC's or solvents and the non-sag paste allows for overhead or vertical patching. The excellent high strength epoxy compound is machinable, can be drilled and tapped and has a 200°F service temperature. Ideal for use on;

- Drive shafts
- Worn metal surfaces
- Mixing blades
- Grain bins and hoppers
- Slurry pumps
- Dust collection systems



All products are offered in (2) quart, (2) gallon and (10) gallon kits. Coverage for a (2) gallon kit is approximately 12.8 square feet at 1/4" thick

Physical Properties	CLS-101	CLS-202 / CLS-303
Tensile Strength (ASTM D-638)	2,800 psi	8,300 psi
Compressive Strength (ASTM D-695)	10,600 psi	10,600 psi
Shore D Hardness	80-85	80-85
Pot Life @ 77° F (100 grams)	6 minutes	35 minutes
Cure Time @ 77° F	As little as 15 minutes	16-24 hours
Service Temperature	180° F (Dry) or 130° F (Wet)	180° F (Dry) or 130° F (Wet)
Intermittent Temperature	225° F (Dry or Wet)	225° F (Dry or Wet)
Mix Ratio	1:1 by volume	1:1 by volume
Mixed Viscosity	Heavy Paste	Heavy Paste
Shelf Life (factory sealed containers)	12 Months	12 Months
Wear Material	Ceramic Beads	202 Ceramic Beads / 303 Silicon Carbide Beads

Physical Properties	CLS-404 / CLS-505	CLS-1100
Tensile Strength (ASTM D-638)	6,300 psi	6,300 psi
Compressive Strength (ASTM D-695)	14,000 psi	14,000 psi
Shore D Hardness	85 - 90	85 - 90
Pot Life @ 77° F (100 grams)	30 minutes	30 minutes
Cure Time @ 77° F	4-5 hours	4-5 hours
Service Temperature	350° F (Dry) or 300° F (Wet)	350° F (Dry) or 150° F (Wet)
Intermittent Temperature	400° F (Dry) or 350° F (Wet)	450° F (Dry or Wet)
Mix Ratio	1:1 by volume	2:1 by volume
Mixed Viscosity	Heavy Paste	Heavy Paste
Shelf Life (factory sealed containers)	12 Months	12 Months
Wear Material	404 Ceramic Beads / 505 Silicon Carbide Beads	Micro Ceramic Beads

Please call C.L. Smith Industrial Company and speak with your Sales Representative for your specific wear compound needs.