

# Epoxy Adhesives

C.L. Smith Industrial Company offers a broad range of epoxies for all your adhesive needs. Our specially formulated materials are used in a wide variety of applications in many different environments.

**CLS-63 Heat Resistant** is a two component, 100% solids epoxy specifically formulated for high temperature applications. CLS-63 is a multi-purpose heat resistant adhesive with low odor, no VOC's or solvents, waterproof and resistant to most chemicals and solvents making it an ideal adhesive for many applications. The thixotropic gel is good for vertical and overhead installations. Convenient 1:1 Mix Ratio

**CLS-70-4 Fast Set** is a two component, 100% solids, fast setting epoxy adhesive with a fluffy paste consistency and is easily mixed and applied. Excellent bonding adhesive for ceramic tile, brick, glass, metal, wood concrete, masonry tile and many plastic surfaces. Epoxy will reach 50% strength in (15) minutes, 100% in (1) hour.

**CLS-473 Regular Set** is a water clean-up version of our CLS-773 that is also an excellent bonding agent for wear materials in applications that may be more demanding. CLS-473 is tough, durable, chemical, solvent and moisture resistant with no VOC's or solvents. The thixotropic gel is good for vertical or overhead installations and cures underwater.

**CLS-773 Regular Set** is a two component, 100% solids, moisture insensitive epoxy adhesive that is an excellent bonding agent for alumina ceramic tile, brick, glass, metal, wood, concrete, masonry tile and many other porous substrates. CLS-773 is our workhorse epoxy for bonding wear materials but it is also great for:

- Crack sealing and healing
- Bonding new concrete to existing concrete
- Bonds to most concrete, wood, fiberglass and metal surfaces
- Convenient 1:1 mix ratio
- Meets ASTM C-881 Type I, II, IV & V, Grade 3, Class B & C

**CLS-973 Semi Flexible** is a pourable, semi-flexible, 100% solids, multi-purpose clear epoxy for gap filling that bonds extremely well to most surfaces including fiberglass, metal, wood and concrete and is our workhorse formula for encapsulating wear materials but is also great for:

- Protective coating and laminating
- Grout binder
- Hard coats and gel coats

All products are offered in (2) quart, (2) gallon, (10) gallon and (22) ounce cartridge kits



**EVALUATE.ENGINEER.EXECUTE**  
**Experts in custom wear solutions for**  
**over 40 years**



| Physical Properties                    | CLS-63                       | CLS-70-4                     | CLS-473                      |
|--|------------------------------|------------------------------|------------------------------|
| Tensile Strength (ASTM D-638)          | 6,000 psi                    | 2,800 psi                    | 5,500 psi                    |
| Compressive Strength (ASTM D-695)      | 14,000 psi                   | 10,600 psi                   | 14,500 psi                   |
| Shore D Hardness                       | 80-85                        | 80-85                        | 80-85                        |
| Pot Life @ 77° F (100 grams)           | 30 minutes                   | 6 minutes                    | 60 minutes                   |
| Cure Time @ 77° F                      | 4-5 hours                    | As little as 15 minutes      | 16 hours                     |
| Service Temperature                    | 350° F (Dry) or 300° F (Wet) | 180° F (Dry) or 130° F (Wet) | 180° F (Dry) or 130° F (Wet) |
| Intermittent Temperature               | 400° F (Dry) or 350° F (Wet) | 225°F (Dry or Wet)           | 225°F (Dry or Wet)           |
| Mix Ratio                              | 1:1 by volume                | 1:1 by volume                | 1:1 by volume                |
| Mixed Viscosity                        | Heavy Gel                    | Heavy Paste                  | Heavy Gel                    |
| Shelf Life (factory sealed containers) | 12 Months                    | 12 Months                    | 12 Months                    |

| Physical Properties                    | CLS-773                      | CLS-973          |
|--|------------------------------|------------------|
| Tensile Strength (ASTM D-638)          | 8,250 psi                    | 5,590 psi        |
| Compressive Strength (ASTM D-695)      | 12,500 psi                   | 8,900 psi        |
| Shore D Hardness                       | 80-85                        | 70-75            |
| Pot Life @ 77° F (100 grams)           | 30 minutes                   | 50 minutes       |
| Cure Time @ 77° F                      | 12 hours                     | 14 hours         |
| Service Temperature                    | 180° F (Dry) or 130° F (Wet) | 130° F           |
| Intermittent Temperature               | 225°F (Dry or Wet)           | 180°F            |
| Mix Ratio                              | 1:1 by volume                | 3.33:1 by weight |
| Mixed Viscosity                        | Creamy Gel                   | Medium Oil       |
| Shelf Life (factory sealed containers) | 12 Months                    | 12 Months        |

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

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Please visit our website at  
[clsmithindustrial.com](http://clsmithindustrial.com)

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