



Epoxy.com Product #641LV

High Temperature Resistant Epoxy Mortar

DESCRIPTION

EPOXY.COM' PRODUCT #641LV Heat Resistant Epoxy is a two component highly cross-linked novolac epoxy resin system. **EPOXY.COM' PRODUCT #641LV** is especially formulated to be used as a high temperature grouting or laminating resin. It is used to protect concrete, steel and other substrates from high temperatures and corrosion. **EPOXY.COM' PRODUCT #641LV** is 100% solids, has a convenient 2:1 by volume mix ratio, and is easy to apply.

ADVANTAGES

- ✦ Stable up to 400°F
- ✦ High chemical resistance to acids, alkalies and other chemicals
- ✦ Low viscosity allows penetration into fiberglass fabric to make high temperature composites
- ✦ Low viscosity allows filler loading for high temp epoxy grout

USES

- ✦ Steel and Concrete Protective Surface where high temperatures are encountered:
- ✦ Chemical processing plants and equipment
- ✦ Food and dairy processing plants
- ✦ Utility plants
- ✦ Industrial Plant Flooring under thermal units
- ✦ PGD scrubber duct
- ✦ Tanks and vessels
- ✦ De-min concrete pads
- ✦ Water boxes
- ✦ Ball mill sumps
- ✦ Heat Exchangers

CURE CYCLE

Immersion/Full Chemical and/or heat Exposure 5 days

Force cures must be used for enhancement of high temperature and chemical resistant properties or to allow the coating to be placed in service before 5 days. Allow the coating a post cure of 12 to 24 hours before force curing.

RECOMMENDED FORCE CURE SCHEDULE

Minimum 4 hours @ 150°F

Minimum 6 hours @ 250°F

CURED: Chemical resistance - acids, alkalies, alcohols, ketones, aromatics and other solvents.

PHYSICAL PROPERTIES

Color	Black
Pot Life	40 minutes @ 72°F
Mixing Ratio	2 Part "A" to 1 Part "B" By Volume
Viscosity	"A" 2500cps "B" 200cps Mixed 1300cps
Tack Free	12 hours @ 72°F
Full Cure	7 days @ 72°F
Force Cure	Minimum 4 hours @ 150°F & then Minimum 6 hours @ 250°F
Recommended Minimum Film Thickness	2 Coats @ 15 mils each
Flash Point	> 200°F

CURED PROPERTIES

Compressive Strength (ASTM D-695 - 7 days)	15,000 p.s.i.
Flexural Strength (ASTM D-790 - 7 days)	13,500 p.s.i.
Tensile Strength (ASTM D-638 - 7 days)	8,000 p.s.i.
Tensile elongation (ASTM D-638 - 7 days)	>2.8%
Shore D Hardness	85
Adhesion ASTM D 4541	Concrete Failure
Operating Temperature	Wet: 300°F Dry: 400°F
PH Range	1 to 13.5

SURFACE PREPARATION

Concrete: Remove dirt, loose particles and oil contaminants by scarification, sandblasting, Shotblasting. Vacuum surface before application.

Steel: Remove all grease, dirt and other contaminants from surface prior to sandblasting. Grind sharp edges to a radius of 1/8". Remove all weld splatters. Sandblast to a white metal finish according to SSPC-SP-5-63 or NACE standard TM-01-70 with a minimum anchor profile of 3 mils.

MIXING

Mix 2 parts "A" Component with 1 part "B" Component using a slow-speed drill and EpoxySystems' - **Mixing Paddle** for 3-5 minutes. Apply immediately. High temperatures will shorten pot life.

APPLICATION

EPOXYSYSTEMS' PRODUCT #641LV can be applied by brush, roller or trowel.
EPOXYSYSTEMS' PRODUCT #641LV can be applied by trowel or grout pump.
EPOXYSYSTEMS' PRODUCT #641LV is designed as a one coat system (minimum 45 mils, maximum 300 mils). Substrate temperature should be a minimum of 60° F for application to commence. If a second coat is needed before the first coat cures, no surface preparation is needed. Simply apply the second coat maintaining the required standards. However, if the first coat has cured longer than 7 days the first coat must be brush blasted prior to the second coat. **COATING:** One gallon covers approximately 26.7 ft.² at 60 mils

Grout EPOXYSYSTEMS' PRODUCT #641LV can be easily made into a heat resistant epoxy grout by adding from 1 to 3 parts by volume of Product #76 **Epoxy Extender** to the mixed epoxy.

3 gallons EPOXYSYSTEMS' PRODUCT #641LV + (3) 48 lb. bags #76 = 2,246 cu.in. per unit

CLEANING: Clean all equipment immediately after use with MEK or acetone.

Notes:

(over)

CAUTION

"A" Component contains epoxy resin. DANGER! "B" Component contains alkaline amines; strong sensitizer. May cause skin sensitization or other allergic responses. Use with good ventilation, particularly if material is heated or sprayed. Prevent all contact with skin or eyes. Wear protective clothing, goggles, gloves and/or barrier creams. Keep container closed when not in use. Wash thoroughly after handling.

FIRST AID: In case of skin contact, immediately wash with soap and water. In case of eye contact, flush eyes with copious amounts of water for at least fifteen (15) minutes. Remove contaminated clothing shoes. If irritation persists, seek medical attention. Wash clothing before reuse.

KEEP AWAY FROM CHILDREN / FOR INDUSTRIAL USE ONLY



**FOR INDUSTRIAL USE ONLY
KEEP AWAY FROM CHILDREN**

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