

מערכת אפוקסי לציפוי בטון

נתונים טכניים – רטוב:

- % מצקים – 100%
- משקל סגולי -
- זמן עבוד (C ? 20) -
- יבש למגע -
- ייבוש סופי -
- יבוש לעמידות כימית מלאה – 7 ימים.
- פריימר –

נתונים טכניים יבש:

- קושי SHORE D -
- חוזק ללחיצה -
- חוזק למתיחה -
- הדבקות -
- הדבקות לבטון - טובה מהחוזק הפנימי של הבטון.
- עמידות בשחיקה -
- מדול אלסטיות –

CHEMICAL RESISTANCE OF EPOXY COATING TYPE

P.C.R – ERPCERTIN

| | | |
|----------------------------|--------|--------|
| SAE WATER, BRINE | 20% | ***** |
| PETROLEUM | | ***** |
| CRUDE OIL / FUEL OIL MIXTU | | ***** |
| TETRAETHYL LEAD FUEL | | ***** |
| TOLUENE | | *****X |
| XYLENE | | *****X |
| PHENOL AQ. SOL | 95% | *****X |
| THIONYL CHLORIDE CONC. | | *****X |
| SULPHURIC ACID | 50% | *****X |
| | 60% | *****X |
| | 70% | *****X |
| | 96-98% | *****X |
| HYDROCHLORIC ACID | 10% | *****X |
| | CONC. | *****X |
| NITRIC ACID | 10% | *****X |
| | 20% | *****X |
| PHOSPHORIC ACID | 10% | *****X |
| | 43% | *****X |
| | 85% | *****X |
| CHROMIC ACID | 10% | *****X |
| ACETIC ACID | 50% | *****X |
| | 100% | *****X |
| LACTIC ACID | 10% | ***** |
| AMIMONIA | 10% | ***** |
| | CONC. | ***** |
| CAUSTIC SODA | 30% | ***** |
| JAVEL WATER | | ***** |
| SULPHITE SPENT LIQUOR | | ***** |
| PAPER BLEACHING SOLUTION | | *****X |
| SODIUM MONOCHLORACETATE | | *****X |
| FORMALDEHYDE | 40% | *****X |
| ETHYL ALCOHOL | 95% | *****X |
| BUTYL ALCOHOL | | *****X |
| ISOPROPYL ALCOHOL | | *****X |
| DIACETONE ALCOHOL | | *****X |
| DIOCTYL PHTHALATE | | ***** |
| TRICRESYL PHOSPHATE | | ***** |
| PINE OIL | | ***** |
| ACETONE | | *****X |
| NETHYL ETHYL KETONE | | *****X |
| ETHYL ACETATE | | *****X |
| ETHER | | *****X |
| TRICHLORETHYLENE | | *****X |
| CHLOR-ACETYL CHLORIDE | | *****X |
| EPICHLORHYDRIN | | *****X |
| METHYLENE CHLORIDE | | *****X |
| D.B.M. CONE. | | *****X |
| C.B.M. CONE. | | *****X |

DURATION OF TEST IN MONTH
 COATING THICKNESS : 500 MIN
 CURING : 7 DAYS AT 20 C
 RESISTANT = *
 TEST STOPPED = X

*-----2-----4-----6-----12-----18-----24

Typical Physical Properties

(Test conditions: room temperature)

| | |
|--|----------------------|
| Tensile strength, psi..... | 8,000-9,000 |
| Compressive strength, psi..... | 16,000 |
| Flexural strength, psi..... | 17,700 |
| Impact strength, Izod..... | 0.3-0.4 |
| Hardness, Rockwell M..... | 99-108 |
| Heat-distortion temperature, C..... | 66-76* |
| Modulus of elasticity in flexure, psi..... | 0.54×10^6 |
| Thermal conductivity, cal/(sec) (sq cm ²) (°C) (cm)..... | 4.8×10^{-4} |
| Flammability, in./min..... | 0.34-0.36 |
| Shrinkage during cure, in./in..... | 0.004-0.005 |
| Water absorption 24-hr immersion, %..... | 0.11-0.12 |
| Moisture-vapor transmission, at 38 °C, relative humidity 95%, g/sq ft/ 24 hr/in. thickness..... | <0.01 |

Typical Electrical Properties

| Property | Frequency, cyces/ses | | | | | |
|---------------------|-----------------------------|--------|-----------------|--------|--------|--------|
| | 10^2 | 10^3 | 10^4 | 10^5 | 10^6 | 10^7 |
| Power factor | | | | | | |
| -40°C | 0.0220 | 0.0200 | 0.0195 | 0.0175 | 0.0195 | 0.0170 |
| -20°C | 0.0300 | 0.0500 | 0.0500 | 0.0700 | 0.0900 | 0.1000 |
| 20°C | 0.0090 | 0.0400 | 0.0480 | 0.0800 | 0.1000 | 0.1300 |
| 60°C | 0.0045 | 0.0100 | 0.0600 | 0.0750 | 0.1100 | 0.1500 |
| 100°C | 0.0175 | 0.0165 | 0.0300 | 0.0600 | 0.1200 | 0.2000 |
| Dielectric constant | | | | | | |
| -40°C | 3.4 | 3.5 | 3.3 | 3.3 | 3.2 | 3.1 |
| -20°C | 3.8 | 3.8 | 3.75 | 3.7 | 3.6 | 3.4 |
| 20°C | 4.1 | 4.2 | 4.2 | 4.1 | 4.2 | 4.1 |
| 60°C | 4.3 | 4.4 | 4.6 | 4.6 | 4.5 | 4.4 |
| 100°C | 4.5 | 4.6 | 4.7 | 4.8 | 4.9 | 5.0 |
| Volume resistivity | | | | | | |
| 25°C | | | 2×10^8 | ohm-cm | | |
| 50°C | | | 2×10^8 | ohm-cm | | |
| 75°C | | | 2×10^8 | ohm-cm | | |
| 100°C | | | 2×10^8 | ohm-cm | | |
| 125°C | | | 2×10^8 | ohm-cm | | |