Product Bulletin

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CER 112
CER 112-1
CER 112-2
CER 112-4
CER 112-5

EPOXY
LAMINATING
SYSTEMS

0302

DESCRIPTION

The CER-112 Series features clear, low viscosity, two-part epoxy systems which exhibit excellent wet-out and air release. The CER-112 Series produces material of exceptionally high strength, with a range of physical properties and handling characteristics to address a variety of applications with fabrics such as fiberglass, Kevlar and graphite. The CER-112-4 system features a higher elongation percentage for enhanced impact resistance.

SEE BACK FOR DETAILS

HANDLING CHARACTERISTICS @ 25°C/77°F	LAMINATING SYSTEM CER-112	CER-112-1	CER 112-2	CER 112-4	CER 112-5
MIX RATIO:PARTS BY WEIGHT PARTS BY VOLUME DENSITY: MIXED	100R/22H 4.0 R/1H 9.2 lbs/gal 0.039lbs/cu in	100R/18H 5.3 R/1H 9.2 lbs/gal 0.039 lbs/cu in	100R/40H 2.2 R/1H 9.2 lbs/gal 0.038 lbs/cu in	100R/18.5 H 4.7 R/1H 9.1 lbs/gal 0.039 lbs/cu in	100R/40H 2.101R/1H 9.40 lbs/gal 0.0388 lbs/cu in
SPECIFIC GRAVITY	1.07 gms/cc	1.09 gms/cc	1.05 gms/cc	1.09 gms/cc	1.07 gms/cc
MIXED VISCOSITY	250-400 cps	600-650 cps	1150 cps	475 cps	540 cps
WORK LIFE GRAMS MASS	35-50 min. 330 g	15-20 min. 236 g	1 hour,20 min. 280 g	33 min 237 g	4 hours 203 g
DEMOLD TIME	24 hours	16 hours	24 hours	24 hours	36 hours
COMPLETE CURE	48 hours	24 hours	48 hours	48 hours	7 days
WATER ABSORPTION	0.236 %	0.0793 %	0.204 %	0.30%	0.26%
COLOR	Clear	Clear	Clear	Clear	Amber
SHELF LIFE (STORAGE @ AMBIENT TEMPERATURE)	One Year	One Year	One Year	One Year	One Year
PHYSICAL PROPERTIES	6 LAYER, 10 OUNCE GLASS FABRIC LAMINATE:				
ULTIMATE TENSILE STRENGTH TENSILE MODULUS	37,660 psi 2.41 x 10^6 psi	34,800 psi 2.21 x 10^6 psi	34,390 psi 2.03 x 10^6 psi	35,000 psi 2.98 x 10^6 psi	32,930 psi 1.68 x 10^6 psi
ULTIMATE FLEXURAL STRENGTH FLEXURAL MODULUS	55,270 psi 5.54 x 10^6 psi	44,060 psi 5.65 x 10^6 psi	33,580 psi 1.38 x 10^6 psi	34,520 psi 1.41 x 10^6 psi	27,930 psi 1.56 x 10^6 psi
	CAST BAR				
ULTIMATE COMPRESSIVE STRENGTH	10,130 psi	11,670 psi	8,828 psi	4,278 psi	6,842 psi
IMPACT STRENGTH-NOTCHED IZOD	4.84 in lbs	9.21 in lbs	5.30 in lbs	13.76 in lbs	14.87 in lbs
HEAT DEFLECTION TEMPERATURE	122.96°F	135.14°F	134.54°F	125.60°F	114.44°F
HARDNESS	80 Shore D	85 Shore D	81 Shore D	75 Shore D	78 Shore D
SHRINKAGE	0.0001 in/in	0.0001 in/in	0.0002 in/in	0.0002 in/in	0.0002 in/in
COEFFICIENT OF THERMAL EXPANSION	4.16 x 10^{-5} in/in/°F	3.35 x 10^{-5} in/in/°F	4.33 x 10^{-5} in/in/°F	3.86 x 10^{-5} in/in/°F	5.25 x 10^{-5} in/in/°F
TENSILE ELONGATION	4.0 +/- 1%	2.57 %	7.8 %	11.0 %	8.513%