

# Product Bulletin

# CASS POLYMERS

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ES-218  
EPOXY SURFACE COAT  
WHITE - THIXOTROPIC  
SANDABLE

REV: 0302

## DESCRIPTION

ES-218 EPOXY SURFACE COAT is a white, thixotropic, room temperature curing system especially designed for duplication work. This system is ideal for taking duplicates off a clay model, due to the sandability of the system. ES-218 exhibits easy mixing, excellent air release and no-sag for high quality reproduction and duplication for dimensionally stable tools. Use with ADTECH laminating systems, EL-301, EL-302, EL-302-PC, EL-302-L1, EL-302-PCLP or EL-323-TC.

## USES

Masters	Models
Patterns	Keller Models
Engineering Tooling	Checking and Drill Fixtures

## HANDLING CHARACTERISTICS @ 25°C/77°F

Mix Ratio (parts by weight)	100:14
(parts by volume)	5.9:1
Density (Mixed) (lbs/gallon)	11.53
(lbs/in3)	0.050
Specific Gravity (g/cc)	1.39
Viscosity	
Resin (cps)	58,000
Hardener(cps)	5,500
Mixed (cps)	40,000
Work Life (minutes)	15
Tack Free Time (minutes)	90-120
Demold Time (hours)	8-12
Color	
Resin	White
Hardener	Amber
Mixed	White
Shelf Life (Months - Unopened at 25°C/77°F)	12

## PHYSICAL PROPERTIES

Ultimate Tensile Strength (psi) (ASTM D-638.91)	4,132(2,962)
Tensile Modulus (psi) (ASTM D-638.91)	868,900
TensileElongation(%) (ASTM D-638.91)	0.6849
Ultimate Compressive Strength (psi) (ASTM D-695.91)	7,987(8,020)
Compressive Modulus (psi) (ASTM D-695.91)	149,600
Ultimate Flexural Strength (psi) (ASTM D-790.92)	7,110(4,856)
Flexural Modulus (psi) (ASTM D-790.92)	414,800
CTE (in/in/F)	0.0000739

CONTINUED ON REVERSE

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**PHYSICAL PROPERTIES (CONT.)**

Heat Deflection Temperature @ 66 PSI (°C/°F) (ASTM D-648.82).....	48/119
Heat Deflection Temperature @ 264 PSI (°C/°F) (ASTM D-648.82).....	46/114
Notched Izod Impact Strength (in-lb/ft) (ASTM D-256.93A).....	5.65
Moisture Absorption (%) (ASTM D-570.88).....	0.60
Hardness (Shore D).....	80-85
Shrinkage (in/in).....	0.0002