

Technical Data Sheet

E-CAST 207-1

GENERAL DESCRIPTION

Low-Density, Thixotropic Syntactic Epoxy Adhesive

E-CAST 207-1 is a two-part syntactic adhesive potting system for metal, plastic and paper honeycomb core. It is a two-component epoxy syntactic system, with a good balance of physical properties and impact resistance. Its convenient 1:1 by volume mix ratio and fast cure makes it easy to use. When extruded, it is a soft thixotropic paste which will set within 3 minutes on plastics, 15 minutes on metal surfaces and can be sanded in 30 minutes. It has little exotherm during cure with very little shrinkage.

E-CAST 207-1 is formulated with non-abrasive fillers making it user-friendly for meter-mix equipment. A tough adhesive, this syntactic bonds to many substrates, especially prepared metals and plastics.

E-CAST 207-1 has good chemical resistance.

KEY FEATURES

Convenient Mix ratio	Low Exotherm
Thixotropic Soft Paste	Low Shrinkage
Fast Set	Sandable in 30 minutes

COMPONENT PROPERTIES, TYPICAL

Property	E-CAST 207-1 Part A	E-CAST 207-1 Part B
Shelf Life: RT (77°F/25°C) Refrigerated ($\leq 40^{\circ}\text{F}/4.4^{\circ}\text{C}$)	9 months 12 months	9 months 12 months
Density (lb/gal)	8.1-8.6	7.3-8.0
Viscosity (cps)	Semi-thixotropic	Semi-thixotropic
Color	Gray	White

HANDLING PROPERTIES, TYPICAL

Property	E-CAST 207-1
Mix Ratio by Weight	100A : 100B
Mix Ratio by Volume	1A : 1B
Viscosity, Mixed	Non Sag in 1/2" bead
Pot Life, minutes	< 3
Gel Time, < 50 grams, minutes	2-5
Gel Time, on metals, minutes	15
Sandable, minutes	30
Cure Time	3-5 days at RT

PHYSICAL PROPERTIES, TYPICAL

Property	E-CAST 207-1
Hardness	77 Shore D
Cured Color	Light-Gray

Cured: 5 days at RT (25°C / 77°F)

INSTRUCTIONS FOR USE

The recommended method of application for this product is with prepackaged, side-by-side ratio tubes using a dispenser and a static mix nozzle. To ensure an accurate mix ratio when dispensing material through a static mixer, discard the first material extruded from the mixer. Product can now be applied directly to the bonding surface. Static mixers and dispensers are available from Ellsworth Adhesives. Contact the sales department for further information.

TO MIX BY HAND: Proportion out components according to parts by weight or volume ratio into a non-reactive container (polyethylene, polypropylene, or metal de-rimmed can). Container should be about five times larger than the volume of the mixed material. Mix components very thoroughly, preferably with a metal spatula, scraping the sides and bottom of container to incorporate all material.

If working time allows, transfer material to a clean container without scraping sides or bottom before applying. Material should be used immediately.

Note: During application, do not scrape sides or bottom of the container used for mixing. Residual amounts of poorly mixed material may be incorporated. Such material may fail to cure completely, and may not achieve full physical properties.

CURING INSTRUCTIONS

Mix Ratio by Volume: 1 part by volume **E-CAST 207-1 Part A** to 1 part by volume **E-CAST 207-1 Part B**.

Pot Life: Do not mix more than can be applied in 45 minutes. Gel time is about 120 minutes but will vary depending on the mass mixed and the ambient temperature.

Note: Heat cured properties have slightly better adhesive strengths.

Fixture Cure: ~ 16 hours @ (25°C / 77°F)

Full Cure: (1) 3-5 days min @ R.T. (25°C / 77°F)

(2) Overnight R.T. + postcured 2-3 hours @ 66-85°C (150°- 185°F)

Note: Other cure options/schedules are available. Contact Ellsworth Adhesives Technical for further options

READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET (MSDS) PRIOR TO USING THIS PRODUCT.

Notice to User:

The following is made in lieu of all warranties, expressed or implied. Sellers and manufacturers only obligation shall be to replace such quantity of product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, user shall determine the suitability of the product for his intended use, and user assumes all risks and liability whatsoever in connection therewith. The foregoing may not be altered except by an agreement signed by officers/owners of Ellsworth Adhesives

Prepared: 9-12-2007

Revised: 2-16-15

Email: info@ellsworth.com

Phone / Fax: 1-262-253-8600 / 1-262-253-8619

Address: N129W10825Washington Drive
Germantown, Wisconsin 53022

1-800-888-0698

www.ellsworth.com