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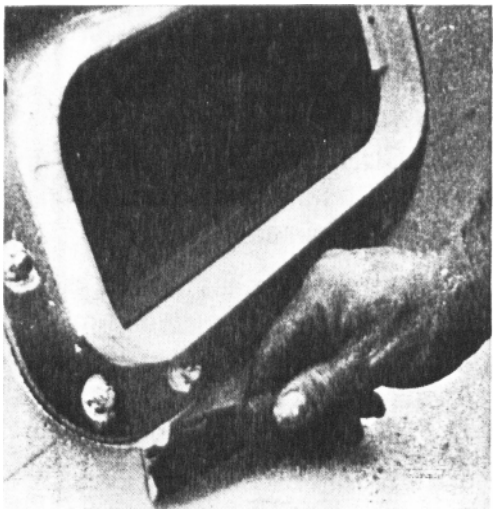
5- MINUTES EPOXIES

TDS 850316

TECHNICAL DATA



Very-fast-hardening 2-component Epoxy Adhesive, Casting and **Patching Compounds.**

SUGGESTED USES:
Castings, repairs, assemblies, coatings, laminations that require quick hardening. **Bonding most rigid materials, metals,** china, ceramics, glass, marble, wood, fiberglass, leather, hard plastics, structural and electric components. Industrial, structural, dielectric and marine applications. **Filling, patching.** Outdoor and indoor repairs, sealing in the crack-injection process. Jewelry and craft. Patch and hobby kits. Installing traffic markers on road and parking surfaces. As it **hardens even at freezing** temperatures, it is widely used for installations, repairs and maintenance in extremely cold environments.

ABOCAST 8012-9/ABOCURE 8012-9:	Clear, Liquid 5-Minute Hardening Epoxy System.
ABOWELD 8101–5/ABOCURE 8101-5:	Thixotropic, Vaseline-like Version of 8012-9.
ABOWELD 8503-9/ABOCURE 8503-9:	Mineral-filled 5-Minute Epoxy Putty.
ABOWELD 8503-10/ABOCURE 8503-10:	Metal-filled 5-Minute Epoxy Putty.

CHARACTERISTICS of the 4 blends are (parts = parts by weight or volume):

	8012-9	**8101-5**	**8503-9**	**8503-10**
ABOCAST: parts:	100	100	100	100
ABOCURE: parts:	100	100	100	100
Appearance:	clear	translucent	tan	gray
Viscosity:	180 poises	vaseline-like	putty	putty
Pot life:	5 minutes	5 minutes	5 minutes	5 minutes
Gel time 0.05"	5 minutes	5 minutes	5 minutes	5 minutes
Hardness, Shore D				
after 10 minutes:	12	13	14	13
after 30 minutes:	32	33	39	40
after 1 hour:	55	60	70	68
after 24 hours:	72	74	78	76
Water absorption				
after 1 day	0.9%	0.8%	0.7%	0.8%
Tensile lap Shear Strength:	2280 psi	2270 psi	1950 psi	2100 psi

CHARACTERISTICS (continued):

Common to all these 4 products is the absence of brittleness typical of conventional 5-minute epoxies, without sacrificing any of the other properties.
They also provide high resistance to weather, water, saltspray, alkalis, diluted acids, several fuels, solvents and other chemicals.
Unlike other epoxies, a thin layer of these compounds does not need any longer to harden than a thick casting.

ABOCAST 8012-9/ABOCURE 8012-9 is the all-purpose, 5-minute, **clear liquid epoxy. Its** honey-like consistency is preferred for casting, embedding, coating, dielectric potting, encapsulating. This product is also available in dual syringe packaging.

ABOCAST 8101-5/ABOCURE 8101-5 is a thixotropic **(vaseline-like consistency)** form of the 8012-9 System. It is translucent, and clear in thin layers. Used where the 8012-9 would be too runny.

ABOCAST 8503-9/ABOCURE 8503-9 is a neutral-buff colored, non-sag, mineral-filled putty to be applied with trowel or other bladed tool for patching, filling, bonding and anchoring in structural and dielectric applications.

ABOCAST 8503-10/ABOCURE 8503-10 is the **toughest,** most **machinable,** 5-minute **metal-filled putty** available. It has the superior tooling, adhesive and structural properties required in machine shops, metal-working industry and maintenance applications. It is neither an electrical conductor nor magnetic.

INSTRUCTIONS FOR USE:

Surfaces must be thoroughly **clean** for good adhesion. Sandblasting, washing, degreasing, sanding are all adequate if properly applied.

ABOCAST /ABOCURE mixing must be thorough, or "soft spots" may result. A spatula, stick, tongue depressor or power mixer can all be used.

Pot Life or Gel Time is the time the ABOCAST/ABOCURE blend is still workable, before hardening. Do not mix more than can be applied within 3-5 minutes.

Application is simple. Brushes, rollers, cups, squeeze-bottles, or automatic metering-mixing dispensing pumps can all be used to fit the operating conditions for casting and coating. The thicker products can be applied with common putty knives, trowels, spatulas, other bladed tools, or with appropriate caulking guns.

Hardening, Temperature, Cure. The hardening reaction generates heat and is accelerated by mass and heat. Hardening of very large resin masses may generate so much heat as to scorch the resin. Low temperatures retard the hardening, but the hardening still occurs at temperatures too cold for normal epoxies.

Viscosity is greatly decreased by heat and increased by cold. Thus, better flow, wetting and adhesion, as well as faster hardening, are obtained on warm surfaces, or with a warm resin.

The above information is the result of accurate laboratory and field tests. However, no guarantee is offered, as uses and applications are beyond our control. Specifications are subject to state-of-the-art changes.
[Rev. 911104].