

VALTRON® - Quick Cure Ingot Mounting Adhesive System**VALTRON AD 1339-A RESIN
VALTRON AD 3905-B HARDENER****Features**

- ⇒ Cure time less than 2 - 4 hours at room temperature
- ⇒ Operator friendly color coded system
- ⇒ Patented formulation reduces stress during cure cycle
- ⇒ Easily debonded with heated VALTRON alkaline detergent solution
- ⇒ Extended potlife over 20 minutes
- ⇒ Increased adhesion characteristics

Description

The VALTRON Quick-Cure Ingot Mounting Adhesive is a two component epoxy system consisting of VALTRON AD 1339-A resin and VALTRON AD 3905-B hardener. The cure time for the VALTRON adhesive is app. 2 hours at room temperature. The fast curing adhesive system effectively adheres semiconductor and photovoltaic ingots to mounting fixtures and slicing beams. This new improved epoxy system is designed for wafering applications with demanding adhesion characteristics including thin wafers and higher slurry temperatures.

Typical Physical Properties

Specific Gravity (@ 20° C):	AD 1339-A	1.65 g/cc
	AD 3905-B	1.47 g/cc
Color:	AD 1339-A	White
	AD 3905-B	Purple
Viscosity (Brookfield Model HTB):	AD 1339-A	110.000 - 125.000 cps @ 25° C
	AD 3905-B	35.000 - 50.000 cps @ 25° C

Packaging

- ⇒ 5 Gallon Pail
- ⇒ 4 x 1 Gallon Case
- ⇒ One Gallon Container
- ⇒ One Quart Can
- ⇒ Pre-measured Syringe

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- Step 1** Thoroughly clean the surface of the ingot and the mounting fixture.
- Step 2** Accurately weigh the two components into a mixing cup using 1 part by weight of the AD 1339-A resin and 1 part by weight of the AD 3905-B hardener.
- Step 3** Thoroughly mix the two adhesive components until a uniform color is achieved.
- Step 4** Apply a thin layer of the adhesive to the mounting fixture or a slicing beam.
- Step 5** Place ingot on to the mounting fixture and wipe off any excess adhesive.
- Step 6** Allow adhesive to cure for app. 2 hours at room temperature

Removal/Demounting

The VALTRON Quick-Cure Ingot Mounting Adhesive is designed to provide a temporary bond of the ingot during the wafering process. Following wafering, the Quick-Cure adhesive must be removed from the sliced wafers. The unique properties of this adhesive system allow the removal of the epoxy adhesive using a heated VALTRON high pH alkaline detergent solution. This process allows the sliced wafers to be cleaned of adhesive, saw coolant and kerf in a simple procedure.

- Step 1** Prepare a bath of deionized water heated to 80° C.
- Step 2** Place the sliced wafers in the VALTRON detergent solution.
- Step 3** The adhesive will be removed from the sliced wafers within 10-15 min. The removal time may vary depending on ingot surface conditions.
- Step 4** Thoroughly rinse the demounted wafers with deionized water.

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