

VALTRON® - Ingot Mounting Adhesive System**VALTRON AD 1210-A & VALTRON AD 1230-A RESIN
VALTRON AD 1210-B HARDENER****Features**

- ⇒ Patented formulation
- ⇒ Reduced blade dressing
- ⇒ 4-6 hours cure time at ambient temperature
- ⇒ Various viscosity formulations
- ⇒ Simple two-component system
- ⇒ Improved slicing yields

Description

The VALTRON AD 1210-A and AD 1230-A Ingot Mounting Adhesive is a patented epoxy system for attaching semiconductor and photovoltaic ingots and boules to slicing beams for wafering. The two-component VALTRON adhesive system reduces cure time, increases ID saw blade life and provides improved slicing yields.

Typical Physical Properties

The two-component VALTRON Ingot Mounting Adhesive systems are available in different viscosity formulations:

Hardness (Shore D):	80	
Specific Gravity (@ 20° C):	AD 1210-A	1.21 g/cc
	AD 1230-A	1.21 g/cc
	AD 1210-B	1.08 g/cc
Color:	AD 1210-A	Grey
	AD 1230-A	Grey
	AD 1210-B	Dark green
Viscosity (Brookfield Model HTB):	AD 1210-A	60.000 - 70.000 cps @ 25° C
	AD 1230-A	30.000 - 40.000 cps @ 25° C
	AD 1210-B	3.000 - 4.000 cps @ 25° C

Fast Cure

The adhesive systems cure in app. four (4) hours at room temperature, compared to conventional epoxy adhesives that require 12-14 hours for curing. The reduced cure time results in greater productivity. The patented adhesive system permits accelerated cure time at elevated temperatures without thermal stress cracking of the ingot.

Suitable for ID Slicing as well

The VALTRON adhesive contains components in the formulation that result in longer diamond saw blade life by reducing the amount of blade dressing required. The adhesive formulation minimizes ID (Inside Diameter) saw blade load-up during wafering.

Increased Saw Blade Live

The VALTRON adhesive contains components in the formulation that result in longer diamond saw blade life by reducing the amount of blade dressing required. The adhesive formulation minimizes ID (Inside Diameter) saw blade load-up during the wafering operation.

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VALTRON AD 1210-B HARDENER****Improved Yields**

The VALTRON Ingot Mounting Adhesives result in improved slicing yields due to reduction in edge and exit chipping, wafer fractures and saw marks during the slicing operation. The unique components in the adhesive formulation minimize the amount of stress at the interface of the adhesive and ingot surface by reducing the coefficient of thermal expansions during the cure cycle.

Application

The VALTRON adhesive is a two-component system for mounting semiconductor and photovoltaic ingots. The typical mix ratio is 10 parts (Part A) resin, to 1 part (Part B) hardener by weight. The hardener is pigmented to indicate when a thorough mix has been obtained between the two adhesive components. It is important that all surfaces be thoroughly cleaned prior to applying the adhesive. A thin, uniform layer of adhesive results in optimum performance.

Demounting

Conventional epoxy removal methods will demount sliced wafers mounted with the VALTRON Ingot Mounting Adhesives.

The VALTRON Ingot Mounting Adhesive can also be removed by using a VALTRON detergent bath at 85-90° C.

Packaging

The VALTRON Adhesive Resin (Part A) is available in 4x1 gallon cases and 5 gallon pails. The VALTRON Hardener (Part B) is packaged in 4x1 pint cases and 5 gallon pails. The adhesive system is also available in a pre-portioned syringe dispensing system.

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