ATE-26522™

Rev: 3.1
C6-57104

DEFINITION

A dual or single-component, solvent-free product, **ATE-26522** is an electrically insulating resin for protection of silicon die and electronic components. Adhesion to metals, ceramics and FR4 type substrates along with its thermal and chemical stability ensure good protection against environmental factors.

PRODUCT DESCRIPTION

Appearance	liquid
Odor	faint
Color	black

Guaranteed specifications	**Standards**	**Methods**
Brookfield™ viscosity @ 25ºC	40,000 – 50,000 cp	Thermosel HBT 28630 Spindle 27, 10rpm
Brookfield™ viscosity @ 25ºC	94,000 – 130,000 cp	Thermosel HBT 28630 Spindle 27, 1rpm

Mix ratio (for guidance)	
By weight	100 parts A / 6-8 parts B

Other information	
Thixotropic Index	3.4
Pot life @ 25± 2ºC	> 8 hours
Specific gravity @ 20ºC (g/cm³)	1.88
Possible curing cycles	1 hour at 70ºC 20-30 min at 90ºC 5-10 min at 125ºC 1-2 min at 150ºC
Storage stability (mixed) Storage stability (unmixed)	6 months ≤ -20ºC 1 year ≤ -20ºC

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APPLICATION PROPERTIES

The consistency of the **ATE-26522** is well suited for micro-dispensers and the reheology allows for good wetting of surfaces in contact with the resin. It also provides good adhesion to substrates. It is thixotropic, fast curing system offers high strength and thermal shock resistance form approximately -40ºC to 150ºC.

METHOD OF USE

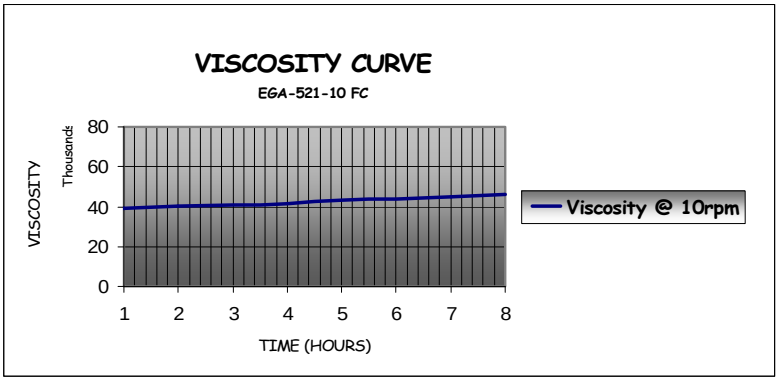
The **ATE-26522** resin can be supplied premixed and frozen, ready to use. It can be supplied in syringes designed to fit on the micro-dispenser, which has the advantage of avoiding handling operations which encourage the entrainment of air bubbles.

When the product is supplied in pots (bulk), the resin should preferable be degassed for 15 minutes under a vacuum of less than 1mm of mercury.

As with most resin products, crystallization of the A side component can happen while in storage and can be returned to its original state without any performance and or quality loss by heating to 60ºC for 1-2 hours.

TYPICAL PROPERTIES OF THE CURED SYSTEM

The properties set out below were obtained after curing for 30 minutes at 80ºC. They were determined following measurements carried out in the laboratory over a small number of tests. They are values given by way of guidance, and do not constitute a guarantee. It will be for the user, in all cases, to carry out his/her own tests to determine whether the **ATE-26522** resin can be used for the particular application he/she has in mind.



1 – PHYSICO-CHEMICAL PROPERTIES

Properties	Methods	Units	Typical values
Shore D hardness	NFT 51109	-	92
Lap shear to AL	NFT 76107	PSI	2,800
Chlorine content	MIL-STD-883	PPM	< 5
Sodium content	MIL-STD-883	PPM	< 4
Potassium content	MIL-STD-883	PPM	< 1

2- THERMAL PROPERTIES

Properties	Methods	Units	Typical values
Glass transition temperature Tg	DSC 1	ºC	> 130ºC
Coefficient of linear expansion from -50ºC to + 130ºC	TMA 1	10`6	30
Thermal conductivity (at 25ºC)	CTH 2	W/(m.K)	1.3
Decomposition temperature	TGA 1	ºC	> 300

FIELD OF USE

The **ATE-26522** in a single component, high purity insulating resin has been developed for protecting semi-conductors in the field of MCM, chip carriers, hybrid circuits and chip on board applications. It is generally recommended for glob top applications and can be used a cavity fill. The high ionic purity guarantees good reliability of the semi-conductor. The same is true of the adhesion on different substrates which offers optimum protection against external agents (moisture, dust, etc.)

PRECAUTIONS IN USE

Refer to the attached material safety data sheet.

PACKAGING

The **ATE-26522** resin is supplied premixed and frozen 1,000 g and 5,000 g pots, or 10cc to 30cc syringes. Customer packaging is available upon request. This product can also be supplied in a bulk two part system that can be mixed on the site to avoid reduced shelf life.