



## PRODUCT DESCRIPTION

ELITE-J4300 is two parts epoxy adhesive for bonding of different material with high tensile shear strength such as aluminum, steel, stainless steel, glass, ceramic and some plastic, J4300 formulated with fast cure which working time in 3 minutes at room temperature, it's ideal for bonding, potting and sealing application.

## FEATURE

Easy Dispensing, Fast set  
High Shear Strength  
Excellent Chemical Resistance

## APPLICATION

Assembly of metal, glass and some plastic substrates.  
Encapsulation for electronic component.  
Potting for waterproof..  
Reinforce of electronic joint parts and chip.

## PHYSICAL PROPERTIES

Color	Clear / amber
Viscosity[cp, 25 ] mixed.	8,500
Specific Gravity, gm/cc	1.18
Mix rate, by volume	1 : 1

## CURE CONDITIONS

Working time	3 min.
Fixture time	5 min.
Tack free time (50grams,25 )	7~10 min.
Full cure time (50grams,25 )	24 hours

## CURED PERFORMANCE

Shear Strength (ASTM D-4501) - Steel to steel, gap 0.03mm	3050 psi
Service temperature	-45 ~150
Shore Hardness	Shore D62
Elongation at tear [%]	38%
Water absorption	0.68%
Coefficient of elongation (ppm/ )	85
Chemical Resistance	Excellent
Shrinkage / linear	Approx. 1.8
Surface resistance [ ] (ASTM D149)	1.9x10 <sup>8</sup>

Dielectric strength [kV/m]

29.2

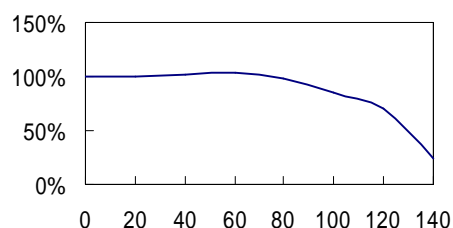
## MECHANICAL STRENGTH

Cure at 23 for 30min. Controlled bonding gap 0.05 mm, substrates Abraded and wiped by IPA, Shear Strength Test on 48 hours after bonding.

Joint part Material	Shear strength
Aluminum alloy	18~22 N/mm <sup>2</sup>
Steel	19~22 N/mm <sup>2</sup>
Stainless steel	16~18 N/mm <sup>2</sup>
Zinc plated steel	17~19 N/mm <sup>2</sup>
Brass	21~23 N/mm <sup>2</sup>
Glass	*12~14 N/mm <sup>2</sup>
FR4	19~23 N/mm <sup>2</sup>
ABS, IPA wipe	6~8 N/mm <sup>2</sup>
PC (Polycarbonate, IPA wipe)	6~8 N/mm <sup>2</sup>
PVC, IPA wipe	6~8 N/mm <sup>2</sup>
(*) : substrate broken.	

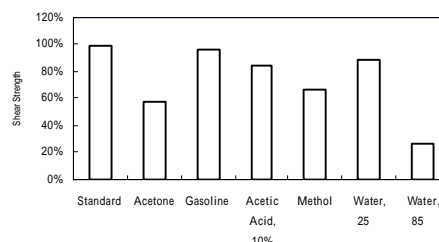
## HOT STRENGTH TEST -TEMPERATURE RESISTANCE

Joint parts material: Aluminum to aluminum. Gap 0.05mm  
Shear strength test at 25 after 48 hours



## Chemical Resistance Data

Soap with chemical 2 weeks. (material: Aluminum alloy 1.5mm thk.)





## **ENVIRONMENTAL TOLERANCE**

Percent of Original Strength Retained (Glass to Glass)

<u>ENVIRONMENT</u>	<u>RETAINED</u> [% PSI]	<u>CONDITIONS</u>
Dry Heat	100	95 , 2 weeks
Wet Heat	87	45 , 95% RH, 1 week
Boiling Water	100	2 hours
Water Immersion	100	25 , 1 week
90% Isopropanol Immersion	100	25 , 24 Hours

## **NOTE**

The data herein are furnished for information only and are believed and reliable. We cannot assume liability or responsibility for results obtained in the use of its products by persons whose methods are outside or beyond our control. It is the users responsibility to determine the suitability of any of the products and methods of use or preparation prior to use mentioned in our literature and furthermore the users responsibility to observe and adopt such precautions as may be advisable for the protection of personnel and property in the handling and use of any of our products.

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Elite Adhesive Tech. Dpt.

## **DIRECTION OF USE**

### **MIXING**

Use Applicator - used with a static mix nozzle, the epoxy can be dispensed, metered, mixed, and directly applied to the surfaces being bonded. Bleeding of air bubbles is always recommended with static mix nozzles.

### **APPLICATION**

Apply mixed adhesive directly to one surface or as a bead. Assemble with the mating part within the recommended working time. Obtain firm contact between the parts to minimize any gap and ensure good contact of the adhesive to each mating surface. A small fillet of adhesive should flow out of the edges to show adequate gap-filling. Apply epoxy to both surfaces and spread to cover the entire area for large gaps or make a bead pattern on both sides, which will allow flow throughout the bond line.

## **STORAGE**

Store in dry cool location. Keep away from heat source. Maximum shelf-life can be expected when stored at room temperature (23 ) in their original containers.

Shelf life : 2 years.

## **PACKAGE**

50ml dual cartridge

## **WARNING**

Avoid contact with skin and eyes. Wash skin with soap and water. Clean up any spills with lacquer thinner.