Product Name: Aron Alpha Type 601

FEATURES

Good bond for water or moisture resistance.

PROPERTIES

Liquid State (Before curing)	Appearance	Colorless & transparent liquid
	Base Monomer	Iso-Propyl cyanoacrylate
	Viscosity (cps)	3.0
	Specific Gravity (d^{20})	1.01

Solid State (After curing)	Appearance	Colorless & transparent solid
	Specific Gravity (d^{20})	1.17
	Hardness (Shore D)	80

PERFORMANCE

Setting time (sec), bond strength in shear and tension (psi); note:* indicates material failure.

Setting time

Material	Setting Time (sec)
Rigid PVC	5
ABS	15
Polycarbonate	20
Natural rubber	5
NBR	5
Steel	15
Aluminum	15

Bonding strength Shear

Material	Bond strength in Shear (psi)
Polycarbonate	700
Steel	2300
Aluminum	2000

Bonding strength Tension

Material	Bond Strength in Tension (psi)
Rigid PVC	4400
ABS	3600*
Steel	4400
Aluminum	3400

Bonding strength Tension after long time exposure to moisture

Water or moisture resistance	Type 601	Type 201
Initial	3400	2900
158°F Water X 12 days	1300	430
122°F 95%RH X 6 months	2900	1900

Material: Aluminum

Test conditions—Test specimen

Tensile strength:	0.5 x 0.5 x 1.5 inch; bonded area 0.25 sq. inch
Tensile shear strength:	for plastic/rubber 0.1 x 1.0 x 2.0 inch; bonded area 0.5 sq. inch
Bonding atmosphere:	72-75°F, 58-62% relative humidity
Test Methods:	ASTM D2095, D3164, D1002

HOW TO APPLY ARON ALPHA

Clean the surfaces to be bonded and then apply Aron Alpha. Be sure to apply Aron Alpha to only one of the surfaces to be bonded, preferably the smaller surface, the surface on which the Aron Alpha set time is longer, or the surface looking upward.

A common error in applying Aron Alpha is to apply an excessive quantity of Aron Alpha or to apply too small of a quantity of Aron Alpha in a wide thin film. In the former case, it is waste of Aron Alpha as well as damaging to the appearance of the bonded materials. This may also bring about chlorosis or solvent cracks.
In the latter case, the Aron Alpha monomer may harden before the actual bonding starts and this will reduce the bond strength to a great extent. This is particularly the case with rubber materials.

Therefore, make sure that the nozzle of the Aron Alpha container is touching the surface to be bonded so that you can apply an optimum quantity of Aron Alpha from the container. Immediately after that, mate the two surfaces and let the Aron Alpha monomer spread between the two surfaces. It is not necessary to spread the monomer by using a rubbing motion.

Aron Alpha monomer, if kept in the form of a mound on the surface, does not harden for 5 to 10 minutes and retains sufficient bond strength.

OPTIMIUM QUANTITY OF ARON ALPHA

With Aron Alpha bonding, the thinner the film of the Aron Alpha monomer on the surface to be bonded, the greater is the resulting bond strength. An excessive quantity of Aron Alpha never helps increase the bond strength. On the contrary, it may bring about chlorosis, solvent cracks, or erosion by the Aron Alpha monomer of the surface to be bonded. On the basis of the value of 5 mg/cm^2, you can obtain standard bond strengths as shown in the tables above.

STORAGE

Conditions to consider when storing Aron Alpha

Humidity
Avoid moist, humid storage conditions.
Fasten cap tightly to avoid exposure to moisture.
Store with desiccant.

Temperature
Avoid storing at a high temperature.
When storing Aron Alpha for an extended period, refrigerate between 32°F and 40°F.

Sunlight
Avoid direct exposure to ultraviolet light (keep in light-proof packaging).

Other
Never store Aron Alpha with an accelerator.

WARNING

Eye and Skin irritant. Bonds skin instantly. Combustible – keep away from heat and flames. Please read adhesive SDS before using.

Disclaimer:
Please be advised that test results are those which were prepare at Toagosei America's laboratory. The results may vary under actual application conditions.