

## ***ADHESIVE SPECIFICATIONS***

### **Shelf Life:**

Two years (stored at 75°F, 50% relative humidity, out of direct sunlight and in a closed package).

### **Application Temperature Range:**

65°F to 120°F (18°C to 49°C), Rubber base and Acrylic.

65°F to 115°F (18°C to 46°C), Sticky adhesive.

### **General Service Temperature Range:**

-20°F to 180°F (-29°C to 82°C), Acrylic.

0°F to 150°F (-18°C to 65°C), Rubber base.

0°F to 135°F (-18°C to 55°C), Sticky adhesive.

### **Surface Preparation:**

It is essential that the surface to which the tape is to be applied is clean, dry and free of grease and oil.

### **Surfaces:**

Stainless Steel

ABS

PVC

Nylon

Aluminum

Alkyd Enamel (Rubber Base Adhesive only)

Galvanized Steel (Rubber Base Adhesive only)

Enamel Painted Steel (Acrylic Base Adhesive only)

### **Dwell Time:**

Rubber Base adhesive, 15 minutes to bond, 1 hour for maximum adhesion.

Acrylic Base adhesive, 48 hours to bond, 72 hours for maximum adhesion.

Sticky adhesive, 10 minutes minimum.

### **UL Recognition, Rubber base and Acrylic tape only:**

The mount and tape together are UL Recognized for indoor use at a maximum temperature rating of 70°F (158°C)

# AL-MP-LIQUID ADHESIVE SPECIFICATIONS

## **SI-GEL SUPERGLUE**

### **DESCRIPTION**

Ritelok SI-GEL Instant Superglue is a very high viscosity surface insensitive ethyl cyanoacrylate based adhesive. The thixotropic gel formulation is suitable for bonding a very wide range of materials.

### **TYPICAL APPLICATIONS**

SI-GEL is specially formulated for high strength, general purpose bonding of most plastics, rubbers, metals and other common substrates. The gel formulation is suitable for bonding poorly mating surfaces requiring some gap filling properties. It is also suitable for use on vertical surfaces as it will not drip or slump.

### **USEFUL HINTS/NOTES**

Cure speed can be improved where cure speed is unacceptably long due to gap thickness or low humidity by using a Ritelok Activator. However, this can result in a reduction in ultimate bond strength. Testing is recommended before use.

### **PROPERTIES**

Very High Viscosity—Gel

Speed: .....	Metal/Metal	<120 seconds
	Plastic/Plastic	<60 seconds
	Rubber/Rubber	<45 seconds

### **INSTRUCTIONS FOR USE**

Ensure parts are clean and free from oil and grease.

### **PROCEDURE FOR APPLICATION**

Product is normally hand applied from a tube or cartridge. Apply sparingly to one side and hold parts together firmly until handling strength is achieved. Product performs best with minimal gap (0.05 mm or less). Excess adhesive can be dissolved with Acetone.

### **COMPATIBLE ACCELERATORS/PRIMER**

Activators may be required for large gap or porous surfaces. Activators also help bond difficult to bond substrates and accelerate cure speeds on cold weather applications. Some plastics may require RiteLok AC77 primer. Use of an activator can reduce bond strength. Recommend testing for suitability of application.

## Ethyl Cyanoacrylate

### TECHNICAL FEATURES

Resin: .....	Ethyl CA
Color .....	max APHA 100
Cure Speed with Activator .....	< 3 seconds
Cure speed without Activator.....	10-30 seconds
Viscosity <sup>1</sup> cps:	
- Range @ 2.5rpm .....	100,000-150,000
- Range @ 20rpm .....	18,000-35,000
Gap Fill: .....	0.012"
Flash Point:.....	>185°F
Shelf Life .....	12 months @ 40°F
Specific Gravity.....	1.10
Max. Operating Temperature .....	-65°F to 180°F

<sup>1</sup> Brookfield RVT, spindle 7

### CURED PERFORMANCE

Full Cure Time .....	24 hours @ 68°F
Shear Strength ....	700-3800 psi (substrate dependent)

### STORAGE

Store in a cool area out of direct sunlight. Refrigeration between 35°F – 48°F gives optimum storage stability. Allow warming to room temperature before using. Do not return unused material to its original container.

### CURE SPEED vs. SUBSTRATE

The rate of cure will depend on the substrate used. The table below shows the fixture time achieved on the different materials at 22°C, 50% relative humidity. This is defined as the time to develop a shear strength of .1 N/mm<sup>2</sup>. Fixture time, ASTM D 1002/EN 1465, seconds:

Steel (degreased)	5 to 20
Aluminum	2 to 10
Zinc Dichromate	10 to 20
Neoprene	<5
Rubber, Nitrile	<5
ABS	2 to 10
PVC	2 to 10
Polycarbonate	10 to 40
Phenolic Materials	2 to 10