



## QUANTUM (SURFACE INSENSITIVE CYANOACRYLATE) 124, 138 & 139

Rev 05/00

### TECHNICAL DATA SHEET

#### PRODUCT DESCRIPTION

This family of **Surface Insensitive Cyanoacrylate Adhesives** was formulated to improve the adhesion property and set time as well as the gap filling capabilities over conventional cyanoacrylate adhesives. This advanced formulation will improve adhesion to difficult to bond plastics, wood, leather, ceramics, elastomers, and acidic surfaces such as freshly plated components.

**Hernon Cyanoacrylates** are state-of-art single component, solventless, room temperature curing adhesives that polymerize rapidly when pressed into a thin film between parts. The presence of surface moisture commences the cure of the adhesive. These adhesives will develop a handling strength within seconds and a full cure within a few hours.

#### TYPICAL APPLICATIONS

##### Bonding

Rubber bumpers  
Permanent locking of plastic  
Fasteners  
Speaker components  
Shock mounts  
Gear to shaft  
Wiper blades  
Acrylic windows  
Names plates  
Catheters  
Honing stones  
Security collars  
O-rings  
Insulation pads

##### Fixturing

Filter caps  
Jumper wires  
Heat sinks  
Gaskets  
Golf club parts  
Tennis racquet parts  
PC boards  
Wire tacking  
Potting  
Transistors  
Tamper proofing adjustable components  
Fiberglass molds

#### PRODUCT BENEFITS

- Single component.
- 100% Solventless.
- Instant setting.
- Improved gap filling capability.
- Improved adhesion to difficult to bond surfaces.

#### SAFETY DATA – HANDLING PRECAUTIONS

**Cyanoacrylates** can form strong bonds to skin rapidly. Accidental skin bonding is best handled by passive, non-surgical first aid. Hot soapy water aids separation of skin tissue. Use peeling; do NOT pull to separate bonded tissue. To avoid skin bonding, wear polyethylene gloves and do NOT use rubber or cloth gloves. Use eye protection. Do NOT get adhesive on your skin or other parts of your body. In case of body contact, flush with water. Get IMMEDIATE medical attention for ANY eye or internal contact. Cyanoacrylate vapors are lachrymatory and can irritate eyes and mucous membranes in poorly ventilated areas. Use goggles or safety glasses.

#### VAPOR CONTROL

Use in a well-ventilated area. **Cyanoacrylate** vapors are heavier than air. Exhaust intake below work area and activated charcoal filters using an acidic charcoal have been found effective in removing vapors from air. These vapors can also be removed with suitable exhaust channel.

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### CLEAN UP OR SPILLED LIQUID

Liquid **cyanocrylate** should NOT be wiped with rags or tissues. The fabric will cause polymerization and large quantities of adhesive will heat or cure causing smoke and strong irritating vapors. Always flood with excess water to clean up spill conditions.

### STORAGE

**Cyanocrylate** adhesives must be stored under refrigeration at temperature or 40°F (± 5°F) for extended shelf life. Before opening, the containers MUST be warmed to room temperature; otherwise, water might condense into the bottle and cause hardening of the adhesive. To prevent contamination of unused adhesive, do NOT return product to its original container.

### TYPICAL PROPERTIES(UNCURED)

	<u>CYANOACRYLATES</u>		
Liquid Adhesives:	124	138	139
Base Resin	---Modified Cyanoacrylate Ester---		
Appearance	Clear	Clear	Clear
Specific Gravity	1.05	1.10	1.10
Viscosity (cPs @ 20°C) 2,000	20	Thixotropic	
Solids Percent	100	100	100
Shelf Life @ 5°V	1 year	1 year	1 year
Flashpoint (Tcc)	200	200	200
Fixture Speed Tested @ 70°F/70% RH			
ABS	7	7	7
Aluminum (etched)	5	20	20
Balsa	--	--	--
Fabric	--	13	13
G-10 Epoxy Glass 10	35	15	
Leather	--	10	20
Neoprene Rubber 5	20	15	
Nitrile Rubber	5	20	20

Paper	5	4	5
Phenolics	10	7	10
Pine	--	20	20
Polycarbonate	35	20	20
PVC	7	10	10
Steel (degreased)	15	15	
Teak	--	17	17
Zinc Dichromate	60	25	35
Military Classification	Type II	--	
Per A-A 3097	Type II		
Class 3	Class I	--	

### TYPICAL PROPERTIES (CURED)

	<u>CYANOACRYLATES</u>		
Liquid Adhesives:	124	138	139
Operating Temperature	-65°F to +180°F (-54°C to +83°C)		
Dielectric Strength	KV/mm -----11.6-----		
Coefficient of thermal	Expansion in/in/°F -----1.25 x 10 <sup>4</sup> -----		
Solubility	Nitromethane, Acetone, MEK		
Strength	(ASTM D2001)PSI		
	2,900	3,500	3,500
On steel cured	For 72 hrs		
180 Peel Strength	6	9	9
(ASTM D1876)	7	8	8

These suggestions and data are based on information we believe to be reliable and accurate, but no guarantee of their accuracy is made. HERNON MANUFACTURING, INC. shall not be liable for any damage, loss or injury, direct or consequential arising out of the use or the inability to use the product. In every case, we urge and recommend that purchasers, before using any product in full scale production, make their own tests to determine whether the product is of satisfactory quality and suitability for their operations, and the user assumes all risk and liability whatsoever, in connection therewith.