

## Technical Data Sheet Quantum<sup>®</sup> 108

June 2008

Page 1 of 1

### Product Description

Hernon<sup>®</sup> Quantum<sup>®</sup> 108 is a single component, room temperature curing adhesive that polymerizes rapidly when pressed into a thin film between parts. The presence of surface moisture initiates the cure of the adhesive.

### Product Benefits

- Penetrates layer of surface contamination.
- Fast handling strength cure.
- Full cure in 24 hours.
- Bonds metals, thermoplastics, ceramics, leather, cork and paper.

### Typical Properties (Uncured)

Property	Value
Base Resin	Modified cyanoacrylate ester
Appearance	Clear liquid
Viscosity @ 25°C, cP	2
Specific gravity	1.07
Flash point	See MSDS

### Typical Properties (Cured)

Cured 24 Hours @ 22°C

#### Physical Properties

Property	Value
Coefficient of thermal expansion, K <sup>-1</sup> , ASTM D696	80 × 10 <sup>-6</sup>
Coefficient of thermal conductivity, W/(m·K), ASTM C177	0.1
Temperature range, °C, (°F)	-55 to 79 (-65 to 175)
Gap Fill, mm (in.)	0.051 (0.002)

### Typical Cured Performance

#### Shear Strength

Cured 24 Hours @ 22°C - tested according to ISO 4587

Substrate	Shear Strength, N/mm <sup>2</sup> (psi)
Steel (grit blasted)	17.2 (2500)

### General Information

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

### Directions For Use

For best performance bond surfaces should be clean and free from grease. This product performs best in thin bond gaps (0.05 mm).

### Disassembly and Cleanup

Liquid Cyanoacrylate should not be wiped with rags or tissue. 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

Cyanoacrylate adhesives must be stored under refrigeration at a temperature of 40°F ± 5°F for extended shelf life. Before opening, the containers must be warmed to room temperature, otherwise, water may condense into the bottle and cause hardening of the adhesive. To prevent contamination of unused adhesive, do not return product to its original container.

### Dispensing Equipment

Hernon<sup>®</sup> offers a complete line of semi and fully automated dispensing equipment. Contact **Hernon<sup>®</sup> Sales** for additional information.

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<sup>®</sup>, 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. Hernon's Quality Management System for the design and manufacture of high performance adhesives and sealants is registered to the ISO9001:2000 Quality Standard.