

Ultra-High Temp, Superior Strength Structural CA Bonder

PRODUCT DESCRIPTION

Incure Heat-Resist™ CM-319 high-temp grade, is a single component ethyl cyanoacrylate designed for difficult applications subjected to thermal shock testing. Medium in viscosity, it provides extra-ordinary bonding strengths of up to 5,200PSI is achievable on some plastics, such as PC and PVC. Incure 319 is resistant to some solvent, such as alcohol, petrol and aromatic hydrocarbons and diluted aqueous acids and bases. Formulated to meet ISO 10993-5 for bio-compatibility, Mil-A-46050C for military specification.

UNCURED PROPERTIES

| | | | | | |
|---|-------|-------------|--------------|---|------------|
| Chemical Type | Ethyl | | | | |
| Appearance | Black | | | | |
| Density, g/ml | 1.06 | Flash Point | 85°C (185°F) | | |
| Viscosity, cP (rpm) | 20 | 400 - 600 | Spindle | 2 | |
| Other viscosities are available upon request. If the viscosity range requested is not our standard offering, this product may be produced with a small lab fee. | | | | | ASTM D2556 |
| Email us at: support@uv-incure.com or your nearest local distributor for more information. | | | | | |

Viscosity (cP) taken at 25°C (77°F) - Call to enquiry for other viscosities.

SETTING TIME FOR MATERIALS (s)

| | | | | | |
|-------|----|------|----|--|---|
| Steel | 45 | EPDM | 30 | | - |
| ABS | 40 | Wood | - | | - |

FULL CURE (hr)

| | |
|---------------|---|
| @25°C, 85% RH | 2 |
| @25°C, 60% RH | 3 |

CURED PROPERTIES

| | |
|---------------------|------------------------------------|
| Service Temperature | -55°C to 140°C (-67°F to 284°F) |
|---------------------|------------------------------------|

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SHELF-LIFE, STORAGE, USE AND HANDLING

Shelf-Life of this unopened product is a minimum of 9 mths from date of manufacture. Avoid direct exposure of bottle to visible light at all times. Containers should remain covered when not in use. Product should be stored 15°C to 25°C (59°F to 77°F). Transfer of product into other packages void all warranties. Users should ensure all bonding surfaces are free of grease, mold release, or any contaminants, as bonding performance will be compromised. Dispense only to one surface only. Bonding parts should be firmly held together for a few seconds before releasing. All tests for cured bonds should be carried out at ambient temperature. For safe handling of this product, please read Material Safety Data-sheet (MSDS) prior to use. Organic solvents, such as IPA, may be used to wipe away uncured material from surfaces.

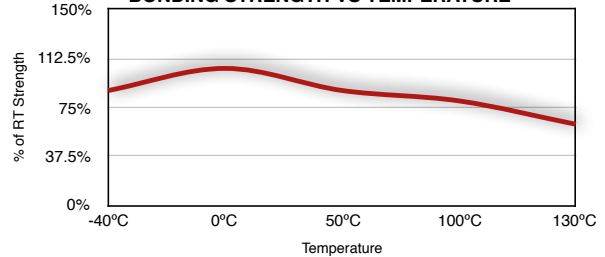
EtO and GAMMA STERILIZATION (Not Applicable)

All Incure Medical products are formulated to subject to standard sterilization methods, such as EtO and Gamma Radiation of 25 to 50 kGrays (cumulative). Enhanced moisture and thermal resistance of this product show excellent adhesion and bonding strength after one cycle of steam auto-clave test. Depending on bond design and structure of the application, users should test specific assemblies after subjecting them to the test requirements. Please consult Incure Support Team for assistance, if your devices are subjected to more than one sterilization cycles.

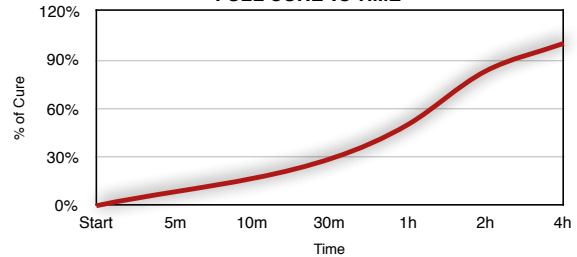
NOTE

The data contained in this document are furnished for information only. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein. INCURE will not be liable for any indirect, special, incidental or consequential loss or damage arising from this INCURE product, regardless of the legal theory asserted. INCURE recommends that each user adequately test its proposed use and application before repetitive use, using this data as a guide.

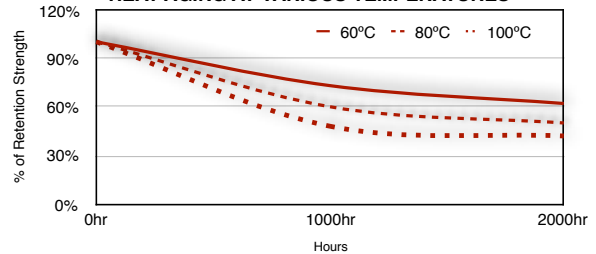
BONDING STRENGTH VS TEMPERATURE



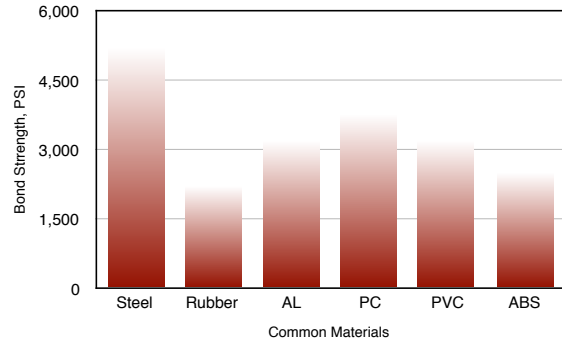
FULL CURE vs TIME



HEAT AGING AT VARIOUS TEMPERATURES



BOND STRENGTH TO MATERIALS



Figures are tested to ASTM 4501. Results may differ with varying application bonding areas, contact surface areas, coatings and material grades, etc.