



Cynergy Zero Technical Data Sheet CA5211

01/18/2018

N109 W13300 ELLSWORTH DRIVE GERMANTOWN, WI 53022 262-253-5900 FAX 262-253-5919

DESCRIPTION:

ResinLab® CA5211 is a one part, low viscosity, odorless UV cure cyanoacrylate. It was designed for bonding applications that require rapid fixturing, fillet cure or surface cure. This on demand type curing makes it a unique product that that allows for unlimited time for component positioning during assembly process and at the same time offering a rapid fixture time.

UV and visible light will initiate the rapid cure of exposed surfaces which will minimize blooming. The rate of cure is dependent on the substrate used.

TYPICAL PROPERTIES:

All properties given are at 25 °C unless otherwise noted.

| Property: | Value: | | Test Method or Source: |
|-----------------------------------|---|------------------------|--|
| Color | Transparent, yellow | | Visual |
| Viscosity | 10-30 cps | | Viscosity, CAP 2000 Viscometer, 50 °C |
| | | | Cone 05 |
| Specific Gravity | 1.13 | | Calculated |
| Cure Speed | Fixture time: | | Fixture time measurements relate to non |
| ABS | 15-30 seconds | | UV/Visible cure. |
| Acrylic | 30-45 second | | |
| Polycarbonate | 15-30 seconds | | |
| PVC | 150-180 seconds | | |
| Tack Free Time: | | | Time in seconds needed to achieve a tack |
| UV Visible Light Sources : | | | free surface. |
| Electrodeless, V bulb | 70 mW/cm ² measured @ 365nm: <10s | | |
| Electrodeless, H bulb | 30 mW/cm ² measured @ 365nm: <10s | | |
| | 100 mW/cm ² measured @ 365nm: <10s | | |
| Visible Light Source: | | | |
| Blue light laser | 70 mW/cm ² measured @ 445nm: <10s | | |
| Lap Shear Strength in psi: | 24h RT Non-UV/Vis cure: | 10s curing w/UV light: | ISO4587 |
| ABS | 1740-1885* | 1160-1305* | 24h cure in dark room with 10s curing |
| Acrylic | 870-1015* | 870-1015* | with UV/Visible light. |
| Polycarbonate | 1595-1740* | 870-1015* | |
| PVC | 870-1015* | 435-1015 | |

^{*}substrate failure





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PREPARATION:

For best results and optimum adhesive performance, surface should be clean and free from contaminants. Contaminants can be removed using suitable solvents. When using a cleaning solvent, first check for material compatibility particularly with plastics. An easy method for removing contaminants is by using a clean soft cloth and wiping the surface with acetone or alcohol. Exposure to daylight, UV light and artificial light should be kept to a minimum during storage and handling.

APPLICATION:

Apply in small amounts to one surface only. The parts should then be mated together under slight pressure. This causes the adhesive to spread out into a thin film and assures optimum adhesive performance. CA5211 cures rapidly allowing for bonded parts to be handled within 15 to 30 seconds for most applications.

SHELF LIFE:

CA5211 has a shelf life of one year when stored at 5 °C. Optimal storage conditions are 2-8 °C. Storage below 2 °C or greater than 8 °C can adversely affect product properties. When stored in a refrigerator, allow the adhesive to gradually warm to room temperature prior to use. Avoid heat, direct sunlight and high moisture areas when storing. Avoid contaminating open containers. Do not return unused adhesive to original container. DO NOT refrigerate open containers.