STEREOLITHOGRAPHY

# Accura® e-Stone™ Material

For Digital Dental Model Production


*Accura® e-Stone™ material is compatible with all intraoral and impression scanning systems that output an .stl file to produce accurate, durable models of individual teeth and arches with crisp resolution.*

Normal dental lab practices, including drilling, grinding and waxing, can be used with Accura® e-Stone™ material. Due to its high accuracy and repeatability, this material can also be used as a fit-check model for all-digital restorations.

## Features

- Durable
- Accurate
- Selection of color
- Digital production

## Benefits

- Compatible with standard dental lab practices
- Reduce breakage vs. plaster
- Decreased steps vs. impression based systems
- Increased visual detail for better margin viewing
- Reproducible & archivable for easy remakes


## Applications

- Replacement for dental stone
- Crown and bridge restorations
- Orthodontic working and study models

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# Accura® e-Stone™ Material

For use with solid-state stereolithography (SLA®) Systems

*Accura® e-Stone™ material is designed to produce dental models from data derived from digital scanners without pouring traditional stone models, saving time and money for dentists and dental laboratories and reducing infection risks.*

## Technical Data

### Liquid Material

| Measurement | Condition | Value |
|---|---|---|
| Appearance | | Peach, Green |
| Liquid Density | @ 25 °C (77 °F) | 1.13 g/cm$^3$ |
| Solid Density | @ 25 °C (77 °F) | 1.19 g/cm$^3$ |
| Viscosity | @ 30 °C (86 °F) | 200-300 cps |
| Penetration Depth (Dp)* | | 4.2 mils |
| Critical Exposure (Ec)* | | 10.5 mJ/cm2 |
| Tested Build Styles | | EXACT™ |

### Post-Cured Material

| Measurement | Condition | Metric | U.S. |
|---|---|---|---|
| Tensile Strength | ASTM D 638 | 37 - 39 MPa | 5400 - 5600 PSI |
| Tensile Modulus | ASTM D 638 | 1500 - 1750 MPa | 220 - 250KSI |
| Elongation at Break (%) | ASTM D 638 | 10 - 23% | 10 - 23% |
| Flexural Strength | ASTM D 790 | 54 - 59 MPa | 7800 - 8500 PSI |
| Flexural Modulus | ASTM D 790 | 1350 - 1750 MPa | 200 - 250 KSI |
| Impact Strength (Notched Izod) | ASTM D 256 | 18 - 25 J/m | 0.3 - 0.5 ft-lb/in |
| Heat Deflection Temperature | ASTM D 648<br>@ 66 PSI<br>@ 264 PSI | <br>58 - 63 °C<br>51 - 55 °C | <br>145 °F<br>131 °F |
| Shore D | | 80 | |
| Glass Transition (Tg) | DMA, E" | 60 °C | 140 °F |

* Dp/Ec values are the same on all systems.

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