

Product Specification

30/09/2016

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|---|--|---|---------------------------------|
| Product name | HeyTec NC | | |
| Type of material | Light cure moldable ceramic nanohybrid composite | | |
| Recommended medical device classification | Class IIa (93/42 EEC) | | |
| Relevant Standards | DIN EN ISO 4049 | | |
| | Parameter | Typical Values | Requirements of ISO 4049 |
| Typical composition | Resin based on Bis-GMA; radio-opaque glass filler; silica; polymer powder; catalyst, stabilizers, pigments | | |
| | Total filler content (by weight) | 81% | |
| | Total filler content (by volume) | 63% | |
| | Specific gravity (20 °C; 68 °F) | 1.99 g/cm ³ | |
| Working properties | Recommended curing time (dental lightcure unit) | 20 sec lighter shades 30 sec darker shades | |
| | Working time (full operating light) | > 120 sec | > 60 sec |
| | Depth of cure (40 sec) | > 2 mm* | > 1,5 mm |
| Physical properties | Flexural strength | 150 MPa | > 80 MPa |
| | Flexural modulus | 10500 MPa | - |
| | Compressive strength | 330 MPa | - |
| | Diametral tensile strength | 45 MPa | - |
| | Water sorption | <20 µg/mm ³ | < 40 µg/mm ³ |
| | Water solubility | <1 µg/mm ³ | < 7,5 µg/mm ³ |
| | Colour stability | very good | ISO 7491 |
| | Polishability | high gloss | - |
| | Barcol hardness | 84 | - |
| | Radio-Opacity | > 200 % Al | > 200 % Al |
| Shrinkage (volumetric) | 2.2 % | - | |
| Storage | | < 25 °C (78 °F) | |
| Shelf life | | 3 years | |

* the measured value (height of the cylinder of cured material) divided by two, according to ISO 4049