

DIN EN ISO 10477:2021-02 (E)

Dentistry - Polymer-based crown and veneering materials (ISO 10477:2020)

Contents	Page
European foreword	4
Foreword	5
Introduction	6
1 Scope	7
2 Normative references	7
3 Terms and definitions	7
4 Classification	8
5 Requirements	8
5.1 General	8
5.2 Depth of cure	9
5.2.1 General	9
5.2.2 Depth of cure, type 2, class 2 materials	9
5.3 Surface finish	9
5.4 Flexural strength	9
5.5 Bond strength	10
5.5.1 Special bonding system without macromechanical retention	10
5.5.2 Values higher than 5 MPa	10
5.6 Water sorption	10
5.7 Solubility	10
5.8 Shade consistency	10
5.9 Colour stability	10
5.10 Biocompatibility	10
6 Sampling	10
6.1 For all tests	10
6.2 For test of shade consistency	11
6.3 For test of colour stability	11
7 Measurement and test methods	11
7.1 General	11
7.1.1 Test conditions	11
7.1.2 Water	11
7.1.3 Preparation of test specimens	11
7.2 Visual inspection	11
7.3 Depth of cure	11
7.3.1 Apparatus	11
7.3.2 Materials	12
7.3.3 Procedure	12
7.3.4 Expression of results	12
7.4 Surface finish	12
7.5 Flexural strength	13
7.5.1 Apparatus	13
7.5.2 Materials	14
7.5.3 Preparation of test specimens	14
7.5.4 Procedure	15

7.5.5	Expression of results	15
7.6	Bond strength	16
7.6.1	Apparatus	16
7.6.2	Materials	17
7.6.3	Preparation of test specimens	17
7.6.4	Procedure	18
7.6.5	Expression of results	19
7.7	Water sorption and solubility	19
7.7.1	Apparatus	19
7.7.2	Materials	20
7.7.3	Preparation of test specimen	20
7.7.4	Procedure	20
7.7.5	Expression of results	21
7.8	Shade consistency and colour stability	22
7.8.1	General	22
7.8.2	Apparatus	22
7.8.3	Materials	22
7.8.4	Preparation of test specimens	23
7.8.5	Procedure	23
7.8.6	Colour comparison	23
7.8.7	Expression of results for shade consistency	23
7.8.8	Expression of results for colour stability	24
8	Packaging and labelling	24
8.1	Packaging	24
8.2	Labelling	24
8.2.1	General	24
8.2.2	Labelling of outer pack	24
8.2.3	Labelling of containers	24
9	Instructions for use	25
	Bibliography	27