

ISO 14356:2024-10 (E)

Dentistry - Duplicating material

Contents

Page

Foreword	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Classification by types	3
5 Material characteristics and properties — Requirements	4
5.1 General	4
5.2 Melting temperature — Type 1 materials	4
5.3 Pouring temperature — Type 1 materials	4
5.4 Component colours — Type 2 materials	4
5.5 Detail reproduction	4
5.6 Compatibility with refractory investment and, if applicable, gypsum	4
5.7 Elastic recovery	4
5.8 Tear strength	4
5.9 Resistance to fungal growth — Type 1 materials only	4
6 Sampling	4
7 Test methods — General	5
7.1 Laboratory conditions	5
7.2 Verification of apparatus function	5
7.3 Specimen preparation and testing	5
7.3.1 General	5
7.3.2 Preparation of Type 1 materials	5
7.3.3 Preparation of Type 2 materials	5
7.4 Pass/fail determinations	5
7.5 Expression of test results	6
8 Specific specimen preparation and test procedures	6
8.1 Melting temperature test — Type 1 materials only	6
8.2 Detail reproduction test	6
8.2.1 Apparatus and materials	6
8.2.2 Specimen preparation (three specimens)	7
8.2.3 Test procedure	7
8.2.4 Pass/fail determination and expression of results	7
8.3 Test for compatibility with refractory investment and, if applicable, gypsum	7
8.3.1 Apparatus and materials	7
8.3.2 Specimen preparation	8
8.3.3 Test procedure	9
8.3.4 Pass/fail determination and expression of results	9
8.4 Elastic recovery test	9
8.4.1 Apparatus — Type 1 materials	9
8.4.2 Apparatus — Type 2 materials	9
8.4.3 Apparatus — Type 1 and Type 2 materials	9
8.4.4 Specimen preparation — Type 1 materials (five specimens)	10
8.4.5 Specimen preparation — Type 2 materials (five specimens)	10
8.4.6 Test procedure — Type 1 and Type 2 materials	11
8.4.7 Calculation of results	11
8.4.8 Pass/fail determinations and expression of results	12
8.5 Tear strength test	12

8.5.1	Apparatus and materials	12
8.5.2	Specimen preparation (five specimens).....	13
8.5.3	Test procedure.....	14
8.5.4	Calculation of results.....	14
8.5.5	Pass/fail determination and expression of results.....	14
8.6	Fungal growth resistance test — Type 1 agar materials only.....	14
8.6.1	Apparatus and materials	14
8.6.2	Specimen preparation (1 test specimen and 1 control specimen).....	14
8.6.3	Test procedure.....	14
8.6.4	Pass/fail determination	14
8.6.5	Expression of results	15
9	Requirements for packaging.....	15
10	Requirements for labelling.....	15
11	Instructions for use — Required information	15
Annex A (informative) Optional procedure for tear test.....		26
Bibliography.....		30