ISO 23317:2025-06 (E)

Implants for surgery - Materials - Simulated body fluid (SBF) preparation procedure and test method to detect apatite formation in SBF for initial screening of bone-contacting implant materials

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 Apparatus and materials 2

5 Test specimen 3
5.1 Test specimen shape and dimensions 3
5.2 Test specimen preparation 3
5.3 Test specimen characterization 3

6 Simulated body fluid 4
6.1 General 4
6.2 Reagents for SBF 4
6.3 Preparation of SBF 5
6.3.1 General 5
6.3.2 Step 1 5
6.3.3 Step 2 5
6.3.4 Step 3 5
6.3.5 Step 4 6
6.3.6 Step 5 6
6.3.7 Step 6 6
6.3.8 Step 7 6
6.3.9 Step 8 6
6.3.10 Step 9 6
6.3.11 Step 10 6
6.3.12 Step 11 6
6.4 Evaluation of SBF 7
6.5 Preservation of SBF 7

7 Procedure of the SBF test 7

8 Test report 10

Annex A (informative) Apparatus for preparing SBF 12

Annex B (informative) Preparation of reference glasses 13

Bibliography 14