

ISO 6474-2:2019 (E)

Implants for surgery — Ceramic materials — Part 2: Composite materials based on a high-purity alumina matrix with zirconia reinforcement

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and Definitions
4	Classification
4.1	Material types
4.2	Test categories
4.2.1	General
4.2.2	Category 1: required tests representative for periodical production control
4.2.3	Category 2: required tests representative for the general material specification
4.3	Material properties
5	Preparation of specimens
6	Test methods
6.1	Bulk density
6.1.1	General
6.1.2	Calculation of ultimate density
6.1.3	Empirical determination of the ultimate density
6.2	Chemical composition
6.3	Microstructure
6.4	Strength properties
6.4.1	General
6.4.2	Biaxial flexural strength
6.4.3	4-point flexural strength
6.4.4	Weibull modulus
6.5	Radioactivity
6.6	Fracture toughness
6.6.1	General
6.6.2	SEVNB
6.6.3	SEPB
6.6.4	SCF
6.7	Hardness
6.8	Young's modulus
6.9	Cyclic fatigue
6.10	Accelerated ageing
6.10.1	General
6.10.2	Strength
6.10.3	Cyclic fatigue
6.10.4	Wear

Page count: 12