



ISO 5834-1

Implants for surgery — Ultra-high-molecular-weight polyethylene —

**Part 1:
Powder form**

Implants chirurgicaux — Polyéthylène à très haute masse moléculaire —

Partie 1: Produits sous forme de poudre

**Fifth edition
2025-07**



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Published in Switzerland

This is a preview of ISO 5834-1:2025. [Click here to purchase the full version from the ANSI store.](#)

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Classification, designation and coding	2
5 Manufacturing requirements	2
6 Flow properties	2
7 Limits of contamination	2
7.1 Ash and trace elements.....	2
7.2 Particulate matter.....	2
8 Test methods	3
8.1 Elongational stress.....	3
8.2 Viscosity number.....	3
8.3 Ash content.....	3
8.4 Trace elements.....	3
8.5 Particulate matter procedure.....	3
9 Test certificate	3
10 Labelling	3
Bibliography	5

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This document was prepared by Technical Committee ISO/TC 150, *Implants for surgery*, Subcommittee SC 1, *Materials*.

This fifth edition cancels and replaces the fourth edition (ISO 5834-1:2019), which has been technically revised.

The main changes are as follows:

- the normative references have been updated;
- the properties in [Table 1](#) have been updated to harmonize with ASTM F648-21.

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While no known surgical implant material has ever been shown to cause absolutely no adverse reactions in the human body, long-term clinical experience with the material referred to in this document has shown that an acceptable level of biological response can be expected when the material is used in appropriate applications. However, this document covers the raw material and not finished medical devices, where the design and fabrication of the device can impact biological response.