KADECORE™ - UHMWPE

Medical-Grade UHMWPE

Extruded shapes for further machining into orthopaedic implant components

MATERIAL	FORM	CONDITION	INTENDED USE
Ultra-High Molecular Weight Polyethylene	Extruded rods	Non-sterile	Orthopaedic implants and Other Medical Applications

PRODUCT OVERVIEW

Implantable-grade UHMWPE machinable shapes are manufactured from medical-grade UHMWPE resin that meets the requirements of the latest applicable version of ASTM F648 and ISO 5834-2. The UHMWPE resin is produced under controlled manufacturing conditions and is suitable for applications in orthopaedic implants.

Kadeswara Healthcare offers UHMWPE extruded rods for further machining into orthopaedic implant components.

TYPICAL APPLICATIONS

Joint replacement components	Acetabular liners	Tibial inserts
Patellar components	Spinal implant components	Orthopaedic bearing components

PRODUCT INFORMATION

Product	KadeCore™ Medical-Grade UHMWPE
Material	Medical Grade - Ultra-High Molecular Weight Polyethylene
Manufacturing Method	Extrusion Method
Standard	ASTM F648 / ISO 5834-2
Available Rod Diameter	Ø20–80 mm
Standard Rod Length	Up to 500 mm
Colour	Natural Colour
Sterile Condition	Non-Sterile
Intended Use	Orthopaedic Implants

Note: Product dimensions and colour availability are subject to the applicable product specification and order requirements.

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Material Performance

Representative technical data for KadeCore™ Medical-Grade UHMWPE

PROPERTIES

PROPERTY	TEST METHOD	UNITS	REQUIREMENTS	TEST RESULTS
Density	ASTM D792	kg/m³	927–944	939
Ultimate Tensile Strength	ASTM D638	MPa	≥40	48.6
Elongation at Break	ASTM D638	%	≥380	440
Tensile Stress at Yield	ASTM D638	MPa	≥21	26.07
Izod Impact Strength (Notched)	ASTM F648-21 Annex A1	kJ/m³	≥126	170.9

STANDARDS & PRODUCT POSITIONING

ASTM F648	Medical-grade UHMWPE specification reference
ISO 5834-2	UHMWPE material requirements reference
Product form	Extruded Rods intended for further machining
Sterility	Non-sterile product

ENGINEERED FOR FURTHER PROCESSING
KadeCore™ extruded shapes are supplied as semi-finished material for machining into orthopaedic implant components.

KADESWARA HEALTHCARE PRIVATE LIMITED

Medical-grade UHMWPE solutions for orthopaedic implant applications. KadeCore™ is the product identity for Kadeswara Healthcare's UHMWPE extruded shapes.

The art of resilience on implants.

Technical Data Sheet | KadeCore™ Medical-Grade UHMWPE | Revision 00

Note: The reported values were obtained by testing specimens machined from medical-grade UHMWPE extruded rod samples under specified laboratory conditions. These results represent the specimens tested and may not necessarily reflect the properties of every supplied rod or production batch. The values are provided for technical reference and are not guaranteed product acceptance criteria unless otherwise specified in the applicable product specification.