



RESCOLL
Research Company

Medical devices

—
ANALYSIS
MECHANICAL TESTING
EXPERTISE
R&D

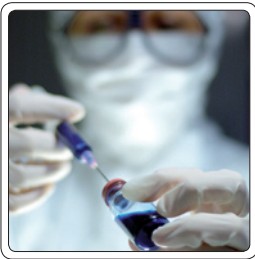


Accreditation N°1-1995.
Scope available on www.cofrac.fr

Are you a medical
an industrialist, manufacturer in orthopaedics,
or another

Rescoll can help you solve your issues or meet your needs
for mechanical characterization in a physiological environment,
substitution materials, fatigue tests on medical devices, or tests
according to European pharmacopeia.

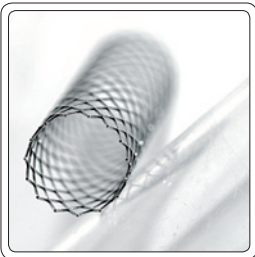
Analysis



Chemical and Physicochemical Analysis

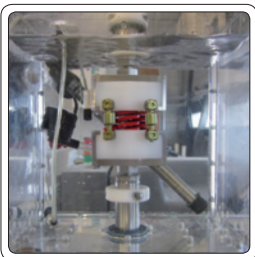
Elementary Analysis – Total Mineral Content
Thermo-mechanical behavior of materials
Dosage of organic pollutants (lubricants), VOC
Viscosity, gel time
Molecular weight measurement
FTIR analysis
Density
Porosity
Residual monomer content
Residual solvent content – Moisture Content
Control on fluids
Heavy metals content
Surface & coating characterization

*FTIR spectroscopy • NMR • Optical / UV microscopy • SEM
Gas • HPLC • SEC Chromatography • ICP-OES • GC-MS • GC-FID
DSC • MDSC • TGA • TMA • DMA
Nano-indentation • nano-scratch
Based on NF, ISO, ASTM standards*



Product Stability

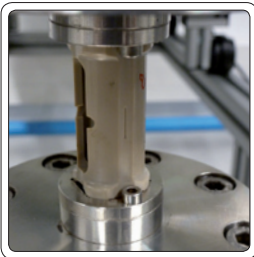
Accelerated ageing
• Temperature and humidity controlled oven
• Thermal cycling/Moisture cycling
• UV A and B ageing
• Corrosion resistance
• Immersion
Tensile testing on blister and bag
Permeability on blister and bag



device manufacturer,
ocular, dental, textiles implant/scaffold fields
related field ?

Mechanical testing

*in controlled temperature
and/or physiological serum bath*



On specimens

- Tensile, compression, flexural
- Shear, shock
- Endurance, creep, relaxation

On products or devices

- Spine, knee, hip, dental...

Dynamometer 10N to 250 kN

5 mechanical endurance instruments (Bose, MTS, Metravib)

Biaxial optical extensometer



Expertise

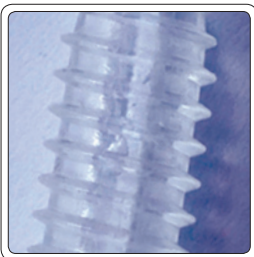
Several Rescoll staff members are certified experts for the Bordeaux Courts (Commerce and First Instance) as well as OSEO (the French Innovation Agency), and technical experts for the European Commission in the field of materials and chemical products.

Failure: Identify cause of failure on implants or device

Pollution: Analyze and compare materials

Process

Conformity: Validate product purity



R&D

As a major actor in several National and European multi-partner projects, Rescoll's team is developing:

Non-resorbable composite and polymer implants

A new generation of biomimetic resorbable implants

Biocompatible adhesive assemblies

Bioactive coatings enabling substance release

Risk Analysis & Regulatory Issues

• *Formulation* • *Scale up* • *Reverse engineering* • *Surface treatment (sandblasting, atmospheric plasma)* • *Literature review*

Rescoll's competitive advantages:

- **Highly qualified staff**
(doctors, engineers and senior technicians specialized in the characterization and study of polymer materials) – *more than 10 years of scientific and technical expertise*
- **High-Tech, regularly maintained test means based on international standards**
- **Highly responsive**
(*results generally delivered within a week*)
- **Fast adaptation/development of test methods**



RESCOLL
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www.rescoll.fr

tel. +335 47 74 69 00

contact: biomaterials@rescoll.eu

AQUITAINE

8 allée Geoffroy Saint Hilaire
CS 30021
F-33615 Pessac Cedex

RHÔNE ALPES

43 boulevard du 11 novembre 1918
F-69100 Villeurbanne

References

Medacta
ConMed
Septodont
Noraker
Stalice Santé
Tekka
BBraun
Creaspine
Carmat
Ceva
Cardial
Cousin Biotech
Acteon
Technimed
Ellipse
Pierre Fabre Médicaments
Galenix Développement
L'Oréal Recherche
Spine Next
Laboratoires Santé Beauté
Textile Hi-Tec
Implanet
ART
S14 Implants
BIOSPINE Implants

Certified ISO9001

Accreditations:

ISO17025 (COFRAC Test Accreditation)

CIR (Crédit Impôt Recherche)

Court-appointed expert by first instance and commerce court of Bordeaux



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