

# ISO 10993-12 Sample Preparation Checklist

## ✓ Confirm Device Configuration

Ensure the test article represents the final, clinically used configuration

## ✓ Define Contact Type & Duration

Align sample preparation with the device's biological contact category and exposure duration per ISO 10993-1

## ✓ Select Appropriate Test Samples

Include worst-case materials, manufacturing variants, and high-exposure surfaces

## ✓ Validate Sample Size & Surface Area

Calculate and document the surface area-to-volume ratio as required by ISO 10993-12

## ✓ Choose Extraction Solvents

Use solvents compatible with device materials and relevant to clinical use, ensuring no degradation, swelling, or particulate generation

## ✓ Set Extraction Conditions

Document time, temperature, agitation, and rationale

## ✓ Use Correct Reference Materials

Include stable, well-characterized, traceable reference standards

## ✓ Apply Clean, Controlled Handling

Prevent contamination during cutting, cleaning, or sterilization handling steps

## ✓ Record Sterilization & Pretreatment

Capture cycle parameters and justify any deviations

## ✓ Document Justifications for Waivers/Reductions

Provide scientific rationale if sample prep steps are minimized or omitted