

## Oil for Tissue Culture

*Delivering the Results You Desire...  
...Quality and Consistency at Its Best  
with Our New Atomic Fingerprinting Technologies*

### Ready-to-use, highly refined, USP pharmaceutical-grade light mineral oil

- Find the mineral oil that suits your needs best with our largest selection of Oil for Tissue Culture products available for human embryo culture
- Have confidence with proven product purity and lot-to-lot consistency via our comprehensive Atomic Fingerprinting technology
- Optimal low viscosity and specific gravity for easy handling to facilitate pipetting
- Sterile filtered (SAL 10<sup>-3</sup>) and aseptically processed to eliminate impurities
- Screened with 1-cell MEA for performance and toxicity and highly sensitive Kinetic Turbidimetric LAL testing for endotoxin
- Allows for flexible inventory management with a stable 24-month shelf life



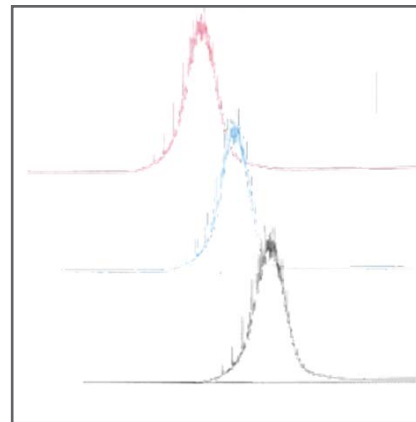
Using mineral oil as a protective barrier for human embryo culture system is essential for optimal in vitro fertilization (IVF) outcomes. The volume of medium used can be very small, making it crucial to control water evaporation and fluctuations in the pH and temperature of the medium. Evaporation increases medium salt concentrations and, consequently, osmolality, which can both independently impair embryo development and may lead to cellular damage.

SAGE Oil for Tissue Culture is a fundamentally inert, non-miscible liquid component that allows diffusion of gases to small volumes of culture medium. It is necessary as an oil overlay to protect against osmotic stress caused by evaporation in the incubator during laboratory procedures such as in vitro fertilization (IVF) and embryo culture. Furthermore, an oil overlay helps diminish the effects of sudden fluctuations in temperature, gas exchange and pH during micromanipulation, such as ICSI and assisted hatching.

## SAGE Sets the Standards with Atomic Fingerprinting!

We are committed to providing embryologists with reliable products they can confidently use with each step of the SAGE embryo culture system. Product purity and lot-to-lot consistency are of paramount importance for optimal ART outcomes; However, traditional mineral oil release criteria in the ART industry do not address any level of physical or chemical consistency of the product.

SAGE IVF has developed the application of Atomic Fingerprinting technology to advance the science of ART manufacturing. Atomic Fingerprinting employs the combination of several analytical and quantitative techniques designed to test and screen our mineral oil products, and includes Fourier Transform Infrared Spectroscopy (FTIR), Nuclear Magnetic Resonance Spectroscopy (NMR), Gas Chromatography coupled with Mass Spectrometry (GC-MS), and Kinematic Viscosity methods. With our Atomic Fingerprinting technology, SAGE can deliver unmatched confidence and assurance with our exceptionally pure, stable and consistent Oil for Tissue Culture.



## What Differentiates the SAGE Oil for Tissue Culture from Other Commercially Available Mineral Oils?

While different mineral oils (synonymous with liquid paraffin oil or white oil) may all appear to be the same, there are distinct differences in the ratios of the various hydrocarbon constituents. Mineral oil, the result of an extensive refinement process from crude oil, is comprised of a mixture of isoparaffins, naphthenes and n-paraffins.

SAGE Oil for Tissue Culture has been shown to be composed of only stable, saturated (paraffinic) hydrocarbons. It is screened for less-stable unsaturated carbon bonds, which are susceptible to peroxidation and therefore can have embryotoxic effects. Our mineral oil is also screened for impurities, such as trace metals, sulfides and stabilizers, which are sometimes harbored in mineral oil and can introduce toxins into the embryo culture environment.

SAGE Oil for Tissue Culture is processed in our state-of-the-art manufacturing facility, which adheres to cGMP requirements and is fully compliant with ISO standards for medical devices. It is sterile filtered (SAL  $10^{-3}$ ) in a Class 100 (ISO 5) cleanroom. Each batch of Oil for Tissue Culture must pass Quality Control tests for sterility, endotoxin levels, 1-cell Mouse Embryo Assay (MEA) for clinical performance and toxicity, and mineral oil properties such as viscosity, specific gravity, clarity and color.

A Certificate of Analysis for each lot with the results of the above Quality Control tests is available at [www.coopersurgical.com](http://www.coopersurgical.com).

## Product Ordering information

### Low-viscosity mineral oil/liquid paraffin/paraffin oil Sterile filtered (SAL $10^{-3}$ )

REF#	DESCRIPTION	UNIT SIZE
ART-4008	Oil for Tissue Culture in Glass Bottle	100 mL
ART-4008-5	Oil for Tissue Culture in Glass Bottle	500 mL
ART-4008P	Oil for Tissue Culture in PET Plastic Bottle	100 mL
ART-4008-5P	Oil for Tissue Culture in PET Plastic Bottle	500 mL

### Low-viscosity mineral oil/liquid paraffin/paraffin oil washed in Quinn's Advantage® Fertilization Medium (ART-1020) Sterile filtered (SAL $10^{-3}$ )

REF#	DESCRIPTION	UNIT SIZE
ART-4009W	Washed Oil for Tissue Culture in Glass Bottle	100 mL
ART-4009-5W	Washed Oil for Tissue Culture in Glass Bottle	500 mL



[www.coopersurgical.com](http://www.coopersurgical.com)

To find out more about SAGE Oil for Tissue Culture products, or to place an order call 800.243.2974.

The marks bearing the symbol "®" are registered trademarks of CooperSurgical.

95 Corporate Drive, Trumbull, CT 06611  
203.601.5200 • 800.243.2974 • fx 800.262.0105  
International: 203.601.9818 • fx 203.601.4747

Form Number: 82023 Rev 05/12  
Copyright © 2012 CooperSurgical