

# Preparation of EmbryoSlide Culture Dishes

The EmbryoSlide® culture dish is specifically designed for the individual culture of up to 12 embryos in the EmbryoScope™ time-lapse incubator. The dish also contains wells designed for rinsing.

The EmbryoSlide culture dishes are designed for easy and stable handling, and are made of culture-tested polystyrene. They are delivered in sterile, single pouches.

Vitrolife recommends preparation of EmbryoSlide culture dishes on the day before use. Prepare the dishes with cold medium and on a non-heated surface to avoid evaporation. The procedure described below requires less than 1.5 minutes per dish.

## General characteristics of the EmbryoSlide culture dish

The embryos are incubated in individual microwells in a small (25 µl) volume of culture medium under a confluent oil cover.

Each well carries a number from 1-12 for identification under a stereo microscope. Each well number corresponds to the well identification number in the EmbryoViewer® software.

Two rinsing wells are available at each end of the dish. These special wells can be used during embryo handling (identified as A-D).

There is a slight variation in how much the temperature decreases in the microwells (approx. 0.6°C) and the rinsing wells (approx. 0.7°C). Both measurements have been performed on a 37°C heating plate over a period of two minutes. This represents normal dish handling time.

Each batch of EmbryoSlide+ culture dishes must pass our

stringent MEA testing procedure before being released for sale. This is part of the Vitrolife quality assurance.

## Preparation for use on the next day

Prepare the EmbryoSlide culture dishes on the day before use. Prepare one dish at a time to minimise the handling time of each dish.



The EmbryoSlide culture dishes should be prepared with cold medium and oil on a non-heated workbench to avoid evaporation of the medium during preparation.

When they have been prepared, the culture dishes must equilibrate overnight before loading embryos into the microwells.

Use a stereo microscope to control the process.

The recommended procedure for preparing the culture dishes is outlined on the next page.



Step	Action
	<p><b>Remove the culture dish from the pouch.</b>  <b>Prepare the dishes with cold culture medium and oil on a non-heated workbench to avoid evaporation.</b>  <b>Prepare one dish at a time to minimise the handling time of each dish.</b></p>
	<p><b>Fill all microwells with a small amount of culture medium*</b>  <b>Use a micropipette.</b>            Slightly overfill the microwell to create a convex meniscus.</p>
	<p><b>Immediately fill all needed wells, including the rinsing wells, with 25 <math>\mu</math>L of culture medium*.</b> Use a standard pipette.</p>
	<p><b>Immediately load 1.4 mL of culture oil* into the reservoir</b>            It is important to apply the oil overlay quickly to avoid evaporation of medium. Make sure that all wells, including the rinsing wells, are covered with a confluent oil layer to eliminate evaporation of medium. Add an additional 25<math>\mu</math>L of culture oil per well not filled with medium.</p>
	<p><b>Push up larger bubbles with a micropipette and remove them</b>  <b>Cover with the lid and equilibrate overnight.</b>  <b>Remove any bubbles that may have formed.</b></p>
	<p><b>Load embryos into the center of microwells. Use a micropipette.</b></p>
	<p><b>Place the dish in the EmbryoScope incubator.</b></p>

\*Vitrolife recommends using G-TL medium, designed specifically for continuous culture with time-lapse technology and OVOIL™ 100% paraffin culture oil for complete control of your culture system. Vitrolife products are produced under highly controlled processes.

Refer to the TECHNOTE *Additional notes on EmbryoSlide® culture dish preparation* for further recommendations about optimal handling of the EmbryoSlide culture dish.