

The G-Series



OVOIL

OVOIL is 100% paraffin oil produced in a highly controlled process from extensively tested LOTS of raw materials. The combination of product integrity and testing secures your results and enhances control of your culture system.

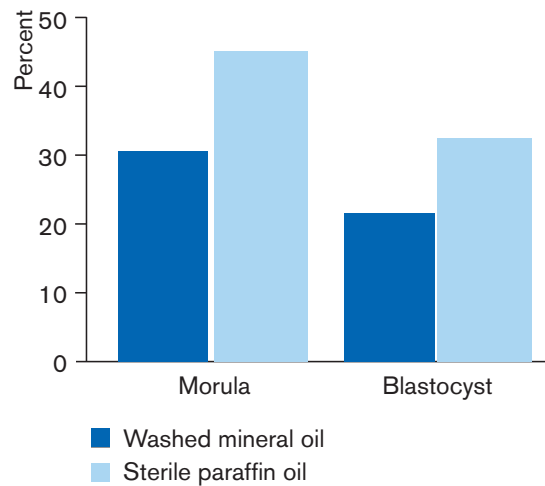
The importance of oil for IVF outcome

Most clinics today use oil to cover embryo culture dishes in order to maintain stable temperature, osmolality and pH. The quality of such oil plays a very important role for IVF success. The oil types commonly used are mineral oil, paraffin oil or a mixture of both these oil types.

Paraffin oil and mineral oil are chemically slightly different. The polycarbon lipid tail of mineral oil contains more unsaturated bonds than the more saturated paraffin oil. This makes mineral oil more unstable and prone to attack by free oxygen radicals and photo-oxidation than paraffin oil.

In a study by Tae et al. bovine embryo development was studied in cultures overlaid with either washed mineral or sterile paraffin oil, Fig 1.

Fig 1. Embryo development under different oil types



Comparison mineral oil and paraffin oil

Sterile filtered paraffin oil overlay resulted in significantly higher ($p < 0.05$) development rate to morula (44.8% versus 30.6%) and blastocyst (32.8% versus 21.7%) than washed mineral oil.

REF: Tae, J.C. et al. J. Assist Reprod & Gen. 2006



The G-Series

Oil is not just oil

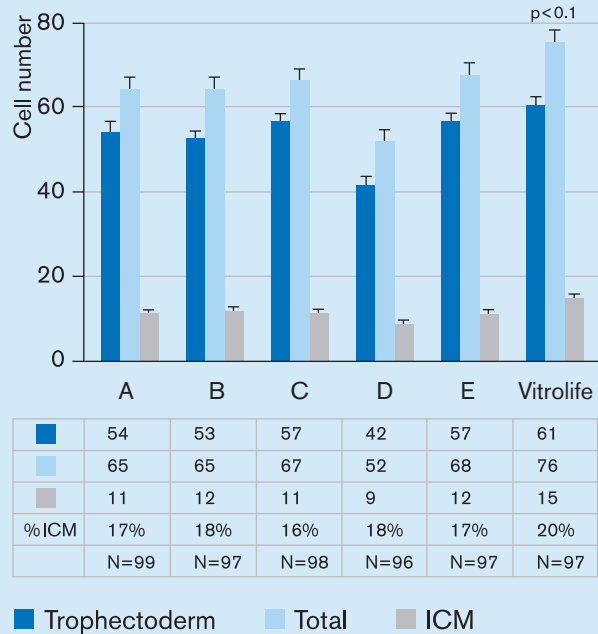
Oils from six different manufacturers were tested and embryo development and viability was evaluated. Fig 2. OVOIL™ showed significantly better development ($p < 0.01$) for all embryo viability parameters studied, number of cells in the trophectoderm and in the inner cell mass, and total number of cells in the blastocysts.

Extensive quality testing

OVOIL is an extensively quality tested product:

- Sperm sensitivity testing
- 1-cell mouse embryo assays
 - Sensitive CF1 mouse strain on raw material
 - 1 cell, F1 hybrid mouse on finished product
 - Mouse embryo assays with multiple endpoints for grading development
 - Blastocyst differentiation staining and cell counts

Fig 2. Embryo viability



Product specification OVOIL

| | |
|--|--|
| REF | 10029 |
| Content | 1 × 100 mL |
| Intended purpose | For covering of medium during in vitro fertilisation and micromanipulation procedures. |
| Description | Light paraffin oil, sterile filtered. |
| Application | For use after pre-equilibration at +37°C and 5 % CO ₂ , 6 % CO ₂ or ambient atmosphere, depending on the intended use. |
| Storage | Store dark at +2 to +8°C |
| Raw Material | All raw material are tested and evaluated by stringent quality control procedures. |
| Composition | Light paraffin oil. |
| Product properties | Sterility |
| | No evidence of microbial growth |
| Bacterial endotoxins (LAL-assay) [IU or EU/mL] | <0.25 |
| Mouse embryo assay (1-cell) [% expanded blastocyst within 96h] | ≥ 80 |
| Mouse embryo assay (1-cell) [blastocyst cell number within 96h] | No statistical difference |
| Micro droplet mouse embryo assay (1-cell) [% expanded blastocyst within 96h] | PASS |
| Micro droplet mouse embryo assay (1-cell)[cell number within 96h] | No statistical difference |
| Human sperm oil assay | PASS |