

Material Safety Data Sheet
Document no: MSDS-POF-LF

Product: NaturARTs®-POF-LF

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Date first created: 2015/12/01

Date revised: 2020/04/09

1. Identification of Substance/Preparation and of the Company

Product name	NaturARTs-POF-LF	Cat. No.:	NaturARTs-POF-LF
Content	Porcine oviductal fluid	Presentation	Lyophilized powder
Product use	For incubating oocytes before IVF, supplementing sperm preparation medium, and supplementing IVF medium.	Application	Research use only
Species to be used	Preferably porcine		
Manufacturer	EmbryoCloud. Pleiades Bldg., 2 nd floor. Campus Espinardo, University of Murcia, 30100 Murcia, Spain.		

2. Composition / Information on Ingredients

Pure porcine oviductal fluid collected from oviducts of animals at the late follicular phase (just before ovulation).

3. Hazard Identification

N/A.

4. First-Aid Measures

Inhalation: Not a likely source of exposure.

Ingestion: Wash out mouth with water. If swallowed consult a physician.

Skin: Wash with soap and water after each contact.

Eyes: Flush with copious amounts of water. Assure adequate flushing by separating the eyelids with fingers. If irritation develops, consult a physician.

5. Fire Fighting Measures

Fire: Not considered to be a fire hazard.

Extinguishing media: Dry chemical, foam, carbon dioxide or water spray.

6. Accidental Release Measures

Absorb on suitable absorbent, such as paper tissue.

7. Handling, Storage and Instructions of Use

Store in original container at -20°C, protected from light. Up to 6 months.

Thaw and gently mix before any use. Avoid thawing cycles. Once thawed, keep at 4°C maximum for 2 weeks and gently mix before using. The product has a milky and white appearance. Little sediments may appear.

¹For porcine in vitro fertilization supplement the culture medium with 1% (v/v) NaturARTs-POF-LF.

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For porcine sperm preparation: supplement medium with 1% (v/v) NaturARTs-POF-LF and proceed with sperm preparation.

For preincubating porcine oocytes before *in vitro* fertilization: treat oocytes with undiluted NaturARTs-POF-LF for 20-30 minutes, wash gently and proceed with insemination.

For supplementing *in vitro* fertilization medium of porcine oocytes: supplement IVF medium with 1-5% (v/v) NaturARTs-POF-LF.

In mammals, biofluids such as oviductal fluid, modulate sperm functionality, gamete interaction and improve development, quality, and gene expression of blastocysts¹⁻⁴. *In vitro* produced-embryo using biofluids have expression and methylation patterns closer to *in vivo*-derived embryo⁴.

8. Exposure Controls/Personal Protection

Avoid contact with skin and eyes. Wash thoroughly after handling.

9. Physiological and Chemical properties

Appearance: lyophilized powder

Odour: Odourless

Boiling point: N/A

Vapour Pressure: N/A

Specific Gravity: N/A

Vapour Density: N/A

Melting Point: N/A

Solubility H₂O: Soluble

Evaporation Rate: N/A

Flash Point: None

Osmolarity: 280-310mOsm

10. Stability and Reactivity

Stability: Stable.

Conditions to avoid: None known.

Hazardous Decomposition or by-products: None known.

Hazardous polymerisation: Not expected to occur.

11. Toxicological Information

No information available.

12. Ecological Information

Does not contain antibiotics.

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13. Disposal Considerations

Dispose of as medical waste.

14. Transportation Information

Classified as non-hazardous for transport.

15. Regulatory Information

N/A.

16. Other Information

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must take independent determinations of the suitability and completeness of information from all other sources to assure proper use and disposal of these materials and the safety and health of employees and customers. EmbryoCloud shall not be held liable for any damage resulting from handling or from contact with its products.

17. References

1. Ballester et al. 2014. Fertility and Sterility 102. doi: 10.1016/j.fertnstert.2014.08.009.
 2. Coy et al. 2010. Theriogenology 74. doi: 10.1016/j.theriogenology.2010.03.005.
 3. Coy et al. 2008. PNAS 105. doi: 10.1073/pnas.0804422105.
 4. Cánovas et al. 2017. Elife 1;6. pii: e23670. doi: 10.7554/eLife.23670.
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