

**Material Safety Data Sheet**  
**Document no: MSDS-BOF-EL**

**Product:** NaturARTs<sup>®</sup>-BOF-EL

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**Date first created: 2015/12/01**

**Date revised: 2020/02/03**

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**1. Identification of Substance/Preparation and of the Company**

<b>Product name</b>	NaturARTs-BOF-EL	<b>Cat. No.:</b>	NaturARTs-BOF-EL
<b>Content</b>	Bovine oviductal fluid	<b>Presentation</b>	Liquid frozen
<b>Product use</b>	For supplementing embryo culture medium.	<b>Application</b>	Research use only
<b>Species to be used</b>	Preferably bovine.		
<b>Manufacturer</b>	EmbryoCloud. Pleiades Bldg., 2 <sup>nd</sup> floor. Campus Espinardo, University of Murcia, 30100 Murcia, Spain.		

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**2. Composition / Information on Ingredients**

Pure bovine oviductal fluid collected from oviducts of animals at the early luteal phase (just after ovulation).

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**3. Hazard Identification**

N/A.

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**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.

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**5. Fire Fighting Measures**

**Fire:** Not considered to be a fire hazard.

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

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**6. Accidental Release Measures**

Absorb on suitable absorbent, such as paper tissue.

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**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.

<sup>1</sup>For bovine early embryo culture: supplement the culture medium with 1% (v/v) NaturARTs-BOF-EL from days 1-3 after insemination. Use NaturARTs-BUF-ML for days 4-8 post insemination.

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In mammals, biofluids such as oviductal fluid, modulate sperm functionality<sup>2,3</sup>, gamete interaction<sup>4</sup> and improve development, quality, and gene expression of blastocysts<sup>5,6</sup>. *In vitro* produced-embryo using biofluids have expression and methylation patterns closer to *in vivo*-derived embryo<sup>7</sup>.

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**8. Exposure Controls/Personal Protection**

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

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**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 H<sub>2</sub>O: Soluble

Evaporation Rate: N/A

Flash Point: None

Osmolarity: 280-310mOsm

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**10. Stability and Reactivity**

Stability: Stable.

Conditions to avoid: None known.

Hazardous Decomposition or by-products: None known.

Hazardous polymerisation: Not expected to occur.

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**11. Toxicological Information**

No information available.

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**12. Ecological Information**

Does not contain antibiotics.

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**13. Disposal Considerations**

Dispose of as medical waste.

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**14. Transportation Information**

Classified as non-hazardous for transport.

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**15. Regulatory Information**

The product has been evaluated in accordance with EU Directive 67/548/EEC. The product has been classified as non-hazardous.

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**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.

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**17. References**

1. Lopera et al. 2015. Reproduction Fertility and Development 14. doi: 10.1071/RD15238.
  2. Coy et al. 2010. Theriogenology 74. doi: 10.1016/j.theriogenology.2010.03.005.
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  6. Cebrián-Serrano et al. 2013. Reproduction in Domestic Animals 48. doi: 10.1111/j.1439-0531.2012.02157.x.
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