

**Material Safety Data Sheet**  
**Document no: MSDS-PUF-ML**

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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-PUF-ML	<b>Cat. No.:</b>	NaturARTs-PUF-ML
<b>Content</b>	Porcine uterine 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 porcine.		
<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 porcine uterine fluid collected from uterus horns of animals at the mid-luteal phase.

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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 porcine embryo culture: supplement the culture medium with 1% (v/v) NaturARTs-PUF-ML from days 3-7 post insemination. Use NaturARTs-POF-EL for days 1-2 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>5-7</sup>. *In vitro* produced-embryo using biofluids have gene expression and methylation patterns closer to *in vivo*-derived embryo<sup>1</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**

Non-hazardous for transport.

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**15. Regulatory Information**

N/A.

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**16. Other Information**

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**17. References**

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