

# NidaCon International AB

## VitriBlast™ Kit

# MATERIAL SAFETY DATA SHEET

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### 1.0 Identification of the Substance/Preparation and of the Company/Undertaking

Product Name: **VitriBlast Kit**

Product Cat. No: **010-VBK**

Sterile salt solutions containing human serum albumin (1-3), Ficoll and Sucrose (3). Separate solutions containing DMSO and Ethyleneglycol. For vitrification of blastocysts in vitro in the laboratory. 10 mL, in borosilicate glass bottles (fiolax), with polypropylene screw caps. DMSO and Ethyleneglycol in 5 mL borosilicate glass bottles (fiolax), with polypropylene screw caps.

Manufacturer: **NidaCon International AB**, Flöjelbergsgatan 16B, 431 37 Mölndal, Sweden.

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### 2.0 Composition/Information on Ingredients

Solutions 1-2: Salt solutions containing human Serum Albumin

Solution 3: Salt solution containing human Serum Albumin, Sucrose and Ficoll

DMSO: C<sub>2</sub>H<sub>6</sub>OS

Ethylene glycol: C<sub>2</sub>H<sub>6</sub>O<sub>2</sub>

### 3.0 Hazard Identification

**Solutions 1-3:** None established

**DMSO:** Not classified as dangerous according to directive 67/548/EEG. DMSO may cause skin irritation. DMSO is readily absorbed through skin and may carry other dissolved chemicals into the body. A garlic-onion odor may develop on breath and skin. Absorption through skin may also cause diarrheas, affect respiration, blood behaviour (fatigue, dizziness, headaches), vision (disturbances of color vision) and urinary system (hematuria).

**Ethylene glycol:** Dangerous to ingest. Repeated excessive ingestion may affect the liver, kidneys, central and peripheral nervous system and blood.

Further information under no. 11, toxicological information.

### 4.0 First-Aid Measures

If inhaled: Remove from exposure. Transfer person to fresh air. If discomfort persists, obtain medical attention

In case of skin contact: Wash off with soap and plenty of water

In case of eye Contact: Flush thoroughly with physiological saline for 15 minutes. If discomfort persists, obtain medical attention.

If swallowed: Rinse mouth with water and give water to drink. Never give water to unconscious person. Obtain medical attention.

### 5.0 Fire-Fighting Measures

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Special fire or explosion hazards: Not applicable

Products of combustion: Not applicable

Special exposure hazards: Not applicable

Protective equipment for fire fighters: Wear self contained breathing apparatus for fire fighting if necessary

### 6.0 Accidental Release/Spill Measures

Personal Precautions: Floors may be slippery, do not inhale vapours, mist or gas

Environmental Precautions: Do not let product enter drains (DMSO and Ethylene glycol)

Clean-Up Methods: Wipe up using appropriate absorbent material and dispose with normal laboratory refuse (Ethylene glycol: treat as dangerous goods), according to community, state or federal regulations. Store in suitable closed containers.

### 7.0 Handling and Storage

Incompatible materials: Not applicable

Storage conditions: Store at room temperature or refrigerated +2° to +8°C.  
After opening at +2° to +8°C

Handling Recommendation (DMSO): Should be stored away from ignition sources. No smoking. Avoid build-up of electrostatic charge.

Handling Precautions: Avoid inhaling, ingestion, and contact with eyes and skin.

### 8.0 Exposure Control/Personal Protection

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Exposure limit:	Not established.
Ventilation requirements:	Normal ventilation.
Respiratory protection:	If dried down to powder form, use face mask when handling large quantities
Eye protection:	Use safety goggles when handling large quantities.
Skin protection:	Use protection gloves when handling large quantities, or at repeated prolonged contact.

A garlic-onion odour may develop on breath and skin when exposed to DMSO. Avoid ingestion and contact with eyes of all components in the kit.

## 9.0 Physical and Chemical Properties

<i>Clear, aqueous, transparent Liquids</i>	<b>Solutions 1-3</b>	<b>DMSO</b>	<b>Ethylene glycol</b>
Flashpoint (°C):	Not established	87°C in closed cup	111°C in closed cup
Odour	Odorless	Odorless	Odorless
Upper explosion limit	Not established	42% (V)	15.3% (V)
Lower explosion limit	Not established	3.5% (V)	3.2% (V)
Ignition temperature	Not established	301°C	400°C
Solubility in water	Already water solution	Completely miscible	Completely miscible soluble
Melting point	Not established	18,4°C	13°C
Boiling point	Not established	189°C at 1.013hPa	196-198°C
Acid/Base	pH 7.2-7.4 (neutral)	Not established, does not affect pH of Solutions 1-3	Not established, does not affect pH of Solutions 1-3
Vapour Pressure	Not established	0.55 hPa at 20°C	0.11-0.13 hPa at 20°C

## 10.0 Stability and Reactivity

Stability under normal conditions:	Stable if store as recommended
Hazardous Decomposition:	<i>Solutions 1-3</i> : none established <i>DMSO</i> ; carbon oxides, sulphur oxides <i>Ethylene glycol</i> ; oxides of carbon.
Hazardous Polymerization:	Will not occur.
Incompatible Materials to avoid:	<i>Solutions 1-3</i> : none established <i>DMSO</i> ; acid chlorides, strong acids, strong oxidizing agents, strong reducing agents, phosphorous halides <i>Ethylene glycol</i> ; strong acids, strongly oxidizing agents, strong bases, aldehydes, aluminium

## 11.0 Toxicological Information

**Solutions 1-3** are essentially inert. No toxic or ill effects under normal operating conditions. LD<sub>50</sub> is not established. Ethylene glycol and DMSO may be toxic in large amounts. Not applicable in the VitriBlast™ kit.

More detailed information for DMSO: RTECS PV6210000 and for Ethylene glycol: RTECS KW2975000

## 12.0 Ecological Information

**Solutions 1-3**: No known adverse ecological effects in the amounts provided in the kit.

## 13.0 Disposal Considerations

The glass bottles and paper cartons can be recycled without adverse problems in the recycling system for glass and paper, respectively.

**Solutions 1-3**: According to applicable regulations for aqueous, physiological salt solutions, i.e., open container and flush contents with tap water via a drain into the sewage system according to local community, state or federal regulations.

**DMSO**: Do not dispose in drain.

**Ethylene glycol**: Do not dispose in drain.

## 14.0 Transport Information

Transport Information: Non-regulated transport. Non-dangerous goods.

## 15.0 Regulatory Information

Manufactured according to Total Quality Management (TQM), ISO 9001/13485 and pharmaceutical quality.

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