pSpark® DNA Cloning System

Prepared according to 1907/2006/EC, Article 31

Revision Date: 19-Jul-2010

Nº Cat. C0001

Nº Cat. C0002

Nº Cat. C0003

Nº Cat. C0004

Nº Cat. C0005

Nº Cat. C0006

Nº Cat. C0019

Nº Cat. C0020

Nº Cat. C0021

Components of the kits:

pSpark® DNA Cloning Vector T4 DNA Ligase 5X Buffer T4 DNA Ligase PEG 6000

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pSpark® DNA Cloning Vector

Prepared according to 1907/2006/EC, Article 31

1-Company/Undertaking Identification

Canvax Biotech SL Parque Científico-Tecnológico "Rabanales 21" C/Astronoma Cecilia Payne, Edif. Canvax 14014, Cordoba, SPAIN

TEL.:(+) 34957 348066 FAX: (+) 34 957 346217

<u>Information in case of emergency:</u>

Toxicological Information Service:

24 H Emergency Response +34 91 562 04 20 C/ Jose Echegaray, 4
28232 Las Rozas
Madrid
Spain

Tel.: +34 91 768 98 00 Fax: +34 91 564 11 41 Mail: intcf@mju.es

For Research use only

2-Hazards identification

- · Hazard description: Not applicable.
- · Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

3-Composition/information on ingredients

· Chemical characterization

• **Description:** Solution, consisting of the following components.

• **Components:** CAS: 7732-18-5

EINECS: 231-791-2 water >50%

· Other components:

Components not listed here are not dangerous or their concentrations do not exceed the limits specified in the EU directive 1999/45/EC.

4-First aid measures

- · **General information:** No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.

5-Fire-Fighting Measures

Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Protective equipment: No special measures required.

6-Accidental Release Measures

Personal precautions: Use personal protective equipment. **Methods for cleaning up:** Soak up with inert absorbent material.

7- Handling and Storage.

Handling:

- · Information for safe handling: No special measures required.
- · Information about fire and explosion protection: No special measures required.
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.

8-Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists valid during the making were used as basis.
- · Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- · **Respiratory protection:** Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Goggles recommended during refilling

9-Phisycal and chemical Properties

General Information

Form Liquid
Colour: Colourless
Odour: Odourless
Change in condition

Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined.

Flash point: Not applicable.

Self-igniting: Product is not selfigniting.

<u>Danger of explosion:</u> Product does not present an explosion hazard.

Density: Not determined.

Solubility in / Miscibility with water: Fully miscible

10-Stability and Reactivity

- •Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- ·Dangerous reactions: No dangerous reactions known.
- Dangerous decomposition products: No dangerous decomposition products known.

11-Toxicological Information

Acute toxicity

Principle Routes of Exposure/Potential Health effects

Eyes No information available
Skin No information available
Inhalation No information available
Ingestion May be harmful if swallowed.

Specific effects (Long Term Effects)
Carcinogenic effects: No information available
Mutagenic effects: No information available
Reproductive toxicity: No information available
Sensitization: No information available

Target Organ Effects: No information available

Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version. When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12-Ecological Information

Ecotoxicity effects:No information available.Mobility:No information available.Biodegradation:Inherently biodegradable.Bioaccumulation:Does not bioaccumulate.

13-Disposal Considerations

Product:

· **Recommendation:** Smaller quantities can be disposed of with household waste.

Uncleaned packaging:

- · **Recommendation:** Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

14-Transport Information

Land transport ADR/RID (cross-border)

· ADR/RID class: -

Maritime transport IMDG:

· IMDG Class: -

· Marine pollutant: No

Air transport ICAO-TI and IATA-DGR:

· ICAO/IATA Class: -

15-Regulatory Information

· Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials.

16-Other Information

This information is based on our present knowledge and shall be used only as a guide. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Canvax Biotech SL is not held liable for any damage resulting from handling or from contact with the above mentioned products. MSDS has been prepared in accordance with EC regulation 1907/2006/EC and other European Union legislation in force.