1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

1.1 Product Details:

Trade Name: FastPANGEA™ High Fidelity DNA Polymerase

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Size</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>P0031</td>
<td>50 units</td>
<td>2 U/μL</td>
</tr>
<tr>
<td>P0032</td>
<td>100 units</td>
<td>2 U/μL</td>
</tr>
<tr>
<td>P0033</td>
<td>500 units</td>
<td>2 U/μL</td>
</tr>
<tr>
<td>P0061</td>
<td>500 rxn (20 μl reaction)</td>
<td>MasterMix (2x)</td>
</tr>
</tbody>
</table>

1.2 Company Details:

Canvax Biotech SL
Parque Científico-Tecnológico “Rabanales 21”
C/Astronoma Cecilia Payne,
Edif. Canvax
14014, Cordoba, SPAIN
TEL.: (+) 34 957 348066
FAX: (+) 34 957 346217

1.3 Toxicological Information Service:

European emergency number: 112
Italy:
CHEMTREC 800-789-767
CHEMTREC (Milan) +(39)-0245557031
Spain:
CHEMTREC 900-868538
CHEMTREC (Barcelona) +(34)-931768545

For Research use only

2. CHEMICAL CHARACTERISATION

Substances Not applicable
Mixtures
3. HAZARDS IDENTIFICATION

Classification of the substance or mixture
Regulation (EC) No 1272/2008
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

Label elements
Product identifier
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]
Signal word
None

EUH210 - Safety data sheet available on request

Other hazards

4. FIRST AID MEASURES

Description of first aid measures

General advice
Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove from exposure, lie down. Do not breathe dust/fume/gas/mist/vapors/spray.

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact
Wash skin with soap and water.

Inhalation
Remove to fresh air.

Ingestion
Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed
No information available

Indication of any immediate medical attention and special treatment needed

Note to physicians
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media
CAUTION: Use of water spray when fighting fire may be inefficient.

Special hazards arising from the substance or mixture No information available

Advice for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Ensure adequate ventilation, especially in confined areas.

For emergency responders
Use personal protection recommended in Section 8.

Environmental precautions
See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. This material and its container must be disposed of as hazardous waste.

7. HANDLING AND STORAGE

Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage temperature
Refer to www.canvaxbio.com for specific information.

Storage Conditions
Keep/store only in original container.

Incompatible materials
None known based on information supplied.
Specific end use(s)
Risk management methods [RMM]
The information required is contained in this Safety Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

Exposure controls

Engineering controls Showers. Eyewash stations.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear suitable protective clothing and gloves.

Respiratory protection Use in well ventilated areas.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No information available</td>
</tr>
<tr>
<td>Upper flammability limit</td>
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</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
</tr>
</tbody>
</table>
Material Safety Data Sheet

Vapor pressure  No information available
Vapor density  No information available
Relative density  No information available
Specific gravity  No information available
Water solubility  No information available
Solubility in other solvents  No information available
Partition coefficient  No information available
Autoignition temperature  No information available
Decomposition temperature  No information available
Kinematic viscosity  No information available
Dynamic viscosity  No information available
Explosive properties  No information available
Oxidizing properties  No information available

Other information
Softening point  No information available
Molecular weight  No information available
VOC content (%)  No information available
Density  No information available
Bulk density  No information available

10. STABILITY AND REACTIVITY
Reactivity: No data available.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Can react briskly with oxidizers - danger of explosion.


Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO2).

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute toxicity

Product information
Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation  Avoid breathing vapors or mists
May cause irritation of respiratory tract

Eye contact  Redness
May cause slight irritation
Skin contact
- Prolonged contact may cause redness and irritation
- Repeated exposure may cause skin dryness or cracking

Ingestion
- May cause drowsiness or dizziness
- Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea
- Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting

Unknown acute toxicity
2.74633 % of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document
ATEmix (inhalation-vapor) 57,000.00 mg/l

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
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</thead>
<tbody>
<tr>
<td>Water</td>
<td>&gt; 90 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>= 2600 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>= 12600 mg/kg (Rat)</td>
<td>&gt; 10 g/kg (Rabbit)</td>
<td>&gt; 570 mg/m3 (Rat) 1 h</td>
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<tr>
<td>Trade Secret</td>
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<td>-</td>
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<td>= 1800 mg/kg (Rat)</td>
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<td>-</td>
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<td>-</td>
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<tr>
<td>Trade Secret</td>
<td>= 1700 mg/kg (Rat)</td>
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</table>

Skin corrosion/irritation
Mild

Serious eye damage/eye irritation
Mild

Sensitization
Not applicable

Germ cell mutagenicity
Not applicable

Carcinogenicity
No information available

Reproductive toxicity
No information available

Developmental toxicity
No information available

Teratogenicity
No information available

STOT - single exposure
No information available

STOT - repeated exposure
No information available

Neurological effects
No information available

Target organ effects
Eyes, Kidneys, Respiratory system, Skin.

Other adverse effects
No information available

Symptoms
No information available

Aspiration hazard
No information available
12. ECOLOGICAL INFORMATION

Toxicity: 0.53833 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility in soil: No information available

Results of PBT and vPvB assessment: No information available

Other adverse effects
   Other adverse effects: No information available
   Endocrine disruptor information: No information available
   Ozone: No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Relevant Information
Keep out of drains, sewers, ditches and waterways.

Waste from Residues/Unused Products
Disposal should be in accordance with applicable regional, national and local laws and regulations. Send to a licensed recycler, reclaimer or incinerator.

Contaminated packaging
Empty containers must be tripled rinsed prior to disposal.

14. TRANSPORT INFORMATION

IMDG

UN/ID No Not regulated
Proper shipping name Not regulated
Hazard class Not regulated
Packing group Not regulated
Marine pollutant Not applicable
Special Provisions None
Transport in bulk according to
   Annex II of MARPOL 73/78 and the
   IBC Code No information available

RID

UN/ID No Not regulated
Proper shipping name Not regulated
Hazard class Not regulated
<table>
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<th>Packing group</th>
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<td>Special Provisions</td>
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**ADR**

<table>
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<tr>
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<td>Special Provisions</td>
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**ICAO (air)**

<table>
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<td>Packing group</td>
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**IATA**

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<td>Hazard class</td>
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</tr>
<tr>
<td>Packing group</td>
<td>Not regulated</td>
</tr>
<tr>
<td>Environmental hazard</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Special Provisions</td>
<td>None</td>
</tr>
</tbody>
</table>

### 15. OTHER INFORMATION

For research use only Not for diagnostic or therapeutic use on humans or animals. The preceding information was acquired through a research and diligent investigation and the recommendations are based on prudent application of professional judgment. The information should not be considered as exhaustive and should be used only as a guide. All materials and mixtures may present unknown hazards and should be used with care. Since the company cannot control the actual methods, volumes, or the field conditions, the company shall not be liable for any damages or losses resulting from handling or from contact with the product described herein. **THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.**

**Abbreviations**

- N/A - Data is not applicable or not available
- SARA - Superfund and Reauthorization Act
- HMIS - Hazard Material Information System
- WHMIS - Workplace Hazard Materials Information System
- NTP - National Toxicology Program
- OSHA - Occupational Health and Safety Administration
- IARC - International Agency for Research on Cancer
PROP 65 - California Safe Drinking Water and Toxic Enforcement Act of 1986
EINECS - European Inventory of Existing Commercial Chemical Substances