1. Identification

1.1. Product identifier

Product No: M0491
Product name: Q5™ High-Fidelity DNA Polymerase

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: This product is for research and development only
Uses advised against: No information available

1.3. Details of the supplier of the safety data sheet

Supplier Address:
New England BioLabs
240 County Road
Ipswich, MA 01938
USA

For further information, please contact
Company Phone Number: 978-927-5054, 800-632-5227 (toll free)
Telefax: 978-921-1350
E-mail address: info@neb.com

1.4. Emergency telephone number

Europe: +1 978-380-2125

2. Hazard(s) identification

2.1. 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]

2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

Hazard statements
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]
EUH210 - Safety data sheet available on request

2.3. Other hazards

Other hazards: No information available
3. Composition/information on ingredients

3.1 Substances
Not applicable

3.2 Mixtures

Full text of H- and EUH-phrases: see section 16

4. First-aid measures

4.1 Description of first aid measures

Inhalation  Remove to fresh air.
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. In the case of skin irritation or allergic reactions see a physician.
Ingestion  Clean mouth with water and drink afterwards plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms  No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Note to physicians  Treat symptomatically.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable Extinguishing Media  Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable Extinguishing Media  No information available.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical  No information available.

5.3 Advice for firefighters

Special protective equipment for fire-fighters  Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions  Ensure adequate ventilation.
For emergency responders
Use personal protection recommended in Section 8.

6.2. Environmental precautions
Environmental precautions
See Section 12 for additional Ecological Information.

6.3. 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
Take up mechanically, placing in appropriate containers for disposal.
Prevention of secondary hazards
Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections
Reference to other sections
See section 8 for more information. See section 13 for more information.

7. Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
Ensure adequate ventilation.
General hygiene considerations
Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities
Storage Conditions
Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Risk management methods [RMM]
The information required is contained in this Safety Data Sheet.

8. Exposure controls/personal protection

8.1. Control parameters
Exposure Limits

Derived No Effect Level (DNEL)
No information available.
Predicted No Effect Concentration (PNEC)
No information available.

8.2. Exposure controls
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.

Respiratory protection  
No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

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

Environmental exposure controls  
No information available.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
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<td></td>
</tr>
<tr>
<td>pH</td>
<td>7.4</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
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</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>100 °C</td>
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</tr>
<tr>
<td>Flash point</td>
<td>100 °C</td>
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</tr>
<tr>
<td>Evaporation rate</td>
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<td>None known</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
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<td>None known</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
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<td>None known</td>
</tr>
<tr>
<td>Upper flammability or explosive limits</td>
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</tr>
<tr>
<td>Lower flammability or explosive limits</td>
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</tr>
<tr>
<td>Vapor pressure</td>
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</tr>
<tr>
<td>Vapor density</td>
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</tr>
<tr>
<td>Relative density</td>
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<tr>
<td>Water solubility</td>
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<tr>
<td>Solubility(ies)</td>
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<tr>
<td>Partition coefficient</td>
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</tr>
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<td>Autoignition temperature</td>
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</tr>
<tr>
<td>Decomposition temperature</td>
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<tr>
<td>Kinematic viscosity</td>
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<tr>
<td>Dynamic viscosity</td>
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</tr>
<tr>
<td>Explosive properties</td>
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</tr>
<tr>
<td>Oxidizing properties</td>
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</table>

9.2. Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Softening point</td>
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<td></td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>VOC Content (%)</td>
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<td></td>
</tr>
<tr>
<td>Liquid Density</td>
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<td></td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

10. Stability and reactivity

10.1. Reactivity

Reactivity  
No information available.
10.2. Chemical stability

Stability
Stable under normal conditions.

Explosion data
- Sensitivity to mechanical impact: None.
- Sensitivity to static discharge: None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions
None under normal processing.

10.4. Conditions to avoid

Conditions to avoid
None known based on information supplied.

10.5. Incompatible materials

Incompatible materials
None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products
None known based on information supplied.

11. Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

- Inhalation: Specific test data for the substance or mixture is not available.
- Eye contact: Specific test data for the substance or mixture is not available.
- Skin contact: Specific test data for the substance or mixture is not available.
- Ingestion: Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms
No information available.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

- ATEmix (oral): 25,200.00 mg/kg
- ATEmix (dermal): 20,000.00 mg/kg

Unknown acute toxicity
52.5 % of the mixture consists of ingredient(s) of unknown toxicity.

- 2.5 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
- 2.5 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
- 52.5 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
- 52.5 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
- 52.5 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).
Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation  No information available.
Serious eye damage/eye irritation No information available.
Respiratory or skin sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity No information available.
Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

12. Ecological information

12.1. Toxicity
Ecotoxicity
Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability
Persistence and degradability No information available.

12.3. Bioaccumulative potential
Bioaccumulation There is no data for this product.

12.4. Mobility in soil
Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment
PBT and vPvB assessment

12.6. Other adverse effects
Other adverse effects No information available.

13. Disposal considerations

13.1. Waste treatment methods
### 14. Transport information

**IMDG**
- **UN number**: Not regulated
- **Proper shipping name**: Not regulated
- **Transport hazard class(es)**: Not regulated
- **Packing group**: Not regulated
- **Marine pollutant**: Not applicable
- **Special Provisions**: None
- **Transport in bulk according to Annex II of MARPOL and the IBC Code**: No information available

**RID**
- **UN/ID No**: Not regulated
- **Proper shipping name**: Not regulated
- **Transport hazard class(es)**: Not regulated
- **Packing group**: Not regulated
- **Environmental hazard**: Not applicable
- **Special Provisions**: None

**ADR**
- **UN number**: Not regulated
- **Proper shipping name**: Not regulated
- **Transport hazard class(es)**: Not regulated
- **Packing group**: Not regulated
- **Environmental hazard**: Not applicable
- **Special Provisions**: None

**IATA**
- **UN number**: Not regulated
- **Proper shipping name**: Not regulated
- **Transport hazard class(es)**: Not regulated
- **Packing group**: Not regulated
- **Environmental hazard**: Not applicable
- **Special Provisions**: None

### 15. Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

**Authorizations and/or restrictions on use:**
This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)
15.2. Chemical safety assessment

Chemical Safety Report

No information available

16. Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend
SVHC: Substances of Very High Concern for Authorization:

Legend  Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
TWA       TWA (time-weighted average)       STEL
Ceiling   Maximum limit value               STEL (Short Term Exposure Limit) Skin designation

Key literature references and sources for data used to compile the SDS
Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AÉGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

Revision date 25-Nov-2019

Prepared by Environmental, Health and Safety
978-927-5054

Revision note SDS is valid 3 years from revision date. Contact info@neb.com for latest revision.

This safety data sheet complies with the requirements of:

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End of Safety Data Sheet