

## SAFETY DATA SHEET



### Expand High Fidelity PCR Buffer

Version  
1.5

Revision Date:  
06/07/2024

Date of last issue: 04/10/2022  
Date of first issue: 12/20/2016

#### SECTION 1. IDENTIFICATION

Product name : Expand High Fidelity PCR Buffer

Product code : 05917131103

Other means of identification : No data available

##### Manufacturer or supplier's details

Company name of supplier : Roche Diagnostics Deutschland GmbH

Address : Sandhoferstrasse  
Mannheim, 68305, Deutschland

Telephone : +496217590

Telefax : +496217592890

E-mail address : info.dia-sds@roche.com

Emergency telephone

Im Notfall: : Werkschutzzentrale Roche +49(0)621-759-2203  
Diagnostics GmbH

Giftnotruf: : Mainz +49(0)6131-19240

##### Recommended use of the chemical and restrictions on use

Recommended use : Laboratory chemicals  
Refer to product literature for further details.

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#### SECTION 2. HAZARDS IDENTIFICATION

##### GHS classification in accordance with the Hazardous Products Regulations

Not a hazardous substance or mixture.

##### GHS label elements

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required

##### Other hazards

None known.

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#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

##### Components

No hazardous ingredients

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#### SECTION 4. FIRST AID MEASURES

**Expand High Fidelity PCR Buffer**Version  
1.5Revision Date:  
06/07/2024Date of last issue: 04/10/2022  
Date of first issue: 12/20/2016

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| General advice  | : Do not leave the victim unattended.  |
| If inhaled  | : Move to fresh air.<br>If unconscious, place in recovery position and seek medical advice.<br>If symptoms persist, call a physician.  |
| In case of skin contact                                     | : If on skin, rinse well with water.   |
| In case of eye contact                                      | : Immediately flush eye(s) with plenty of water.<br>Remove contact lenses.<br>Protect unharmed eye.<br>If eye irritation persists, consult a specialist.   |
| If swallowed  | : Keep respiratory tract clear.<br>Do not give milk or alcoholic beverages.<br>Never give anything by mouth to an unconscious person.<br>If symptoms persist, call a physician.<br>Rinse mouth with water. |
| Most important symptoms and effects, both acute and delayed | : None known.  |
| Notes to physician  | : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.   |

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**SECTION 5. FIRE-FIGHTING MEASURES**

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|--|---|
| Suitable extinguishing media                   | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.   |
| Specific hazards during fire fighting          | : No information available.   |
| Hazardous combustion products                  | : Carbon oxides<br>Nitrogen oxides (NOx)<br>Gaseous hydrogen chloride (HCl).<br>Sulfur oxides   |
| Further information                            | : Standard procedure for chemical fires.<br>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Special protective equipment for fire-fighters | : Wear self-contained breathing apparatus for firefighting if necessary.  |

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

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| Personal precautions, protective equipment and emergency procedures | : Refer to protective measures listed in sections 7 and 8. |
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**Expand High Fidelity PCR Buffer**Version  
1.5Revision Date:  
06/07/2024Date of last issue: 04/10/2022  
Date of first issue: 12/20/2016

- Environmental precautions : Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).  
Keep in suitable, closed containers for disposal.

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**SECTION 7. HANDLING AND STORAGE**

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.
- Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.
- Further information on storage conditions : See label, package insert or internal guidelines
- Materials to avoid : No materials to be especially mentioned.
- Further information on storage stability : No decomposition if stored and applied as directed.

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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Engineering measures** : No data available**Personal protective equipment**

Respiratory protection : No personal respiratory protective equipment normally required.

## Hand protection

In case of contact through splashing:

Material : Nitrile rubber  
Break through time : > 30 min  
Glove thickness : > 0.11 mm

In case of full contact:

Material : butyl-rubber  
Break through time : > 480 min  
Glove thickness : > 0.4 mm

Remarks : The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. This recommendation is only valid for the

**Expand High Fidelity PCR Buffer**Version  
1.5Revision Date:  
06/07/2024Date of last issue: 04/10/2022  
Date of first issue: 12/20/2016

product mentioned in the material safety data sheet and provided by us and for the application specified by us. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Safety glasses

Skin and body protection : Protective suit

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

Color : colorless

Odor : none

Odor Threshold : No data available

pH : 8.0 - 10.0  
Concentration: 100 %

Melting point/range : -5 °C

Boiling point/boiling range : 100 °C

Flash point : does not flash

Evaporation rate : No data available

Flammability (solid, gas) : Does not sustain combustion.

Flammability (liquids) : The product is not flammable., Does not sustain combustion.

Self-ignition : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

**Expand High Fidelity PCR Buffer**Version  
1.5Revision Date:  
06/07/2024Date of last issue: 04/10/2022  
Date of first issue: 12/20/2016

|  |   |  |
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| Vapor pressure                         | : | No data available  |
| Relative vapor density                 | : | No data available  |
| Relative density                       | : | No data available  |
| Density                                | : | 1.03 g/cm <sup>3</sup>                                   |
| Solubility(ies)                        |   |  |
| Water solubility                       | : | completely miscible                                      |
| Solubility in other solvents           | : | No data available  |
| Partition coefficient: n-octanol/water | : | No data available  |
| Autoignition temperature               | : | No data available  |
| Decomposition temperature              | : | No data available  |
| Viscosity                              |   |  |
| Viscosity, dynamic                     | : | No data available  |
| Viscosity, kinematic                   | : | No data available  |
| Explosive properties                   | : | Not explosive  |
| Oxidizing properties                   | : | The substance or mixture is not classified as oxidizing. |

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**SECTION 10. STABILITY AND REACTIVITY**

|                                    |   |  |
|------------------------------------|---|--|
| Reactivity                         | : | No dangerous reaction known under conditions of normal use.  |
| Chemical stability                 | : | Stable under normal conditions.  |
| Possibility of hazardous reactions | : | No dangerous reaction known under conditions of normal use.<br>Stable under recommended storage conditions.<br>No hazards to be specially mentioned. |
| Conditions to avoid                | : | No data available  |
| Incompatible materials             | : | No data available  |
| Hazardous decomposition products   | : | No decomposition if stored and applied as directed.  |

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**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity**

Not classified due to lack of data.

**Expand High Fidelity PCR Buffer**Version  
1.5Revision Date:  
06/07/2024Date of last issue: 04/10/2022  
Date of first issue: 12/20/2016**Product:**Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg  
Method: Calculation methodAcute dermal toxicity : Acute toxicity estimate: > 2,000 mg/kg  
Method: Calculation method**Skin corrosion/irritation**

Not classified due to lack of data.

**Serious eye damage/eye irritation**

Not classified due to lack of data.

**Respiratory or skin sensitization****Skin sensitization**

Not classified due to lack of data.

**Respiratory sensitization**

Not classified due to lack of data.

**Germ cell mutagenicity**

Not classified due to lack of data.

**Carcinogenicity**

Not classified due to lack of data.

**Reproductive toxicity**

Not classified due to lack of data.

**STOT-single exposure**

Not classified due to lack of data.

**STOT-repeated exposure**

Not classified due to lack of data.

**Aspiration toxicity**

Not classified due to lack of data.

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Product:****Ecotoxicology Assessment**

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to : No data available  
the environment**Persistence and degradability**

No data available

**Expand High Fidelity PCR Buffer**

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1.5

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06/07/2024

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**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Other adverse effects**

No data available

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**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : Can be disposed as waste water, when in compliance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.  
Do not re-use empty containers.

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**SECTION 14. TRANSPORT INFORMATION****International Regulations****UNRTDG**

Not regulated as a dangerous good

**IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**Domestic regulation****TDG**

Not regulated as a dangerous good

**Special precautions for user**

Remarks : Not dangerous goods in the meaning of ADR/RID, ADN, IMDG-Code, ICAO/IATA-DGR

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**SECTION 15. REGULATORY INFORMATION**

**WHMIS Classification** : Not controlled.

**The ingredients of this product are reported in the following inventories:**

AIIC : On the inventory, or in compliance with the inventory

DSL : All components of this product are on the Canadian DSL

**Expand High Fidelity PCR Buffer**Version  
1.5Revision Date:  
06/07/2024Date of last issue: 04/10/2022  
Date of first issue: 12/20/2016

|       |   |
|-------|---|
| NZIoC | : On the inventory, or in compliance with the inventory |
| ENCS  | : On the inventory, or in compliance with the inventory |
| ISHL  | : On the inventory, or in compliance with the inventory |
| KECI  | : On the inventory, or in compliance with the inventory |
| PICCS | : On the inventory, or in compliance with the inventory |
| IECSC | : On the inventory, or in compliance with the inventory |
| TCSI  | : On the inventory, or in compliance with the inventory |
| TSCA  | : All substances listed as active on the TSCA inventory |
| TECI  | : Not in compliance with the inventory                  |

**Canadian lists**

No substances are subject to a Significant New Activity Notification.

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**SECTION 16. OTHER INFORMATION****Full text of other abbreviations**

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transporta-



**Expand High Fidelity PCR Buffer**Version  
1.5Revision Date:  
06/07/2024Date of last issue: 04/10/2022  
Date of first issue: 12/20/2016

tion of Dangerous Goods; TECl - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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