SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

<table>
<thead>
<tr>
<th>Product code</th>
<th>Q32855COMPONENTB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>Qubit® RNA Buffer</td>
</tr>
<tr>
<td>Chemical Name</td>
<td>Not applicable</td>
</tr>
<tr>
<td>REACH registration number</td>
<td>No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Relevant identified uses</th>
<th>Use Description Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Description Code</td>
<td></td>
</tr>
<tr>
<td>SU22 - Public domain (administration, education, entertainment, services, craftsmen), PROC15 - Use as a laboratory reagent, PC21 - Laboratory chemicals, SU24 - Scientific research and development</td>
<td></td>
</tr>
</tbody>
</table>

Uses advised against

Not for consumer use.

Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Manufacturer/Supplier</th>
<th>LIFE TECHNOLOGIES EUROPE BV</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIFE TECHNOLOGIES EUROPE BV</td>
<td>KWARTSWEG 2</td>
</tr>
<tr>
<td>2665 NN BLEISWIJK</td>
<td>NETHERLANDS</td>
</tr>
<tr>
<td>31-(0)180 392 400</td>
<td>Email: <a href="mailto:MSDS@lifetech.com">MSDS@lifetech.com</a></td>
</tr>
</tbody>
</table>

24 hour Emergency Response for Hazardous Materials

<table>
<thead>
<tr>
<th>Within the USA + Canada: 1-800-424-9300 and +1 703-527-3887</th>
<th>Outside the USA + Canada: +1 703-741-5970</th>
</tr>
</thead>
<tbody>
<tr>
<td>[or Dangerous Goods] Incident. Spill, Leak, Fire, Exposure, or Accident. Call CHEMTREC</td>
<td></td>
</tr>
<tr>
<td>CHEMTREC Ireland (Dublin) +(353)-19014670 (Greeting Language: English and Irish)</td>
<td></td>
</tr>
<tr>
<td>CHEMTREC UK (London) +(44)-870-8200418 (Greeting Language: English)</td>
<td></td>
</tr>
</tbody>
</table>
SECTION 2: Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Physical hazards
Not classified

Health hazards
Not classified

Environmental Hazards
Not classified

Additional information
Not applicable

Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms
None

Signal word
None

hazard statements
Not applicable

EU Specific Hazard Statements
Not applicable

Precautionary Statements

Prevention
Not applicable

Response
Not applicable

Storage
Not applicable

Disposal
Not applicable

Other Hazards
Not applicable

SECTION 3: Composition/information on ingredients

The product contains no substances which at their given concentration, are considered to be hazardous to health.
SECTION 4: First aid measures

Description of first aid measures

Skin contact
Rinse with plenty of water. Immediate medical attention is not required.

Eye contact
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

INGESTION
Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

Inhalation
Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

Notes to Physician
Treat symptomatically.

Most important symptoms and effects, both acute and delayed
Not applicable.

Indication of any immediate medical attention and special treatment needed
None.

SECTION 5: Firefighting measures

Extinguishing media

Suitable Extinguishing Media

Unsuitable Extinguishing Media
No information available.

Special hazards arising from the substance or mixture
Not known.

Advice for fire-fighters
Standard procedure for chemical fires.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See Section 8 for more detail.

Environmental precautions
No special environmental precautions required.

Methods and material for containment and cleaning up
Soak up with inert absorbent material.

Reference to other sections
See section 8 for more information.

SECTION 7: Handling and storage

Precautions for safe handling
Use personal protective equipment as required. No special handling advices are necessary.

Conditions for safe storage, including any incompatibilities
Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers.

Specific end use(s)
For research use only.
SECTION 8: Exposure controls/personal protection

Control parameters

Exposure Limits
Contains no substances with occupational exposure limit values.

Engineering measures
Ensure adequate ventilation, especially in confined areas.

Exposure controls

Personal protection equipment

Respiratory protection
In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

Hand Protection
Wear suitable gloves Glove material: Compatible chemical-resistant gloves.

Eye protection
Tight sealing safety goggles.

Skin and body protection
Wear suitable protective clothing.

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

Environmental exposure controls
No special environmental precautions required.
SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>no data available</td>
</tr>
<tr>
<td>pH</td>
<td>6-8</td>
</tr>
<tr>
<td>Melting point / melting range</td>
<td>°C Mixture has not been tested</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>°C Mixture has not been tested</td>
</tr>
<tr>
<td>Flash point</td>
<td>°C Mixture has not been tested</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>°C Mixture has not been tested</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>°C Mixture has not been tested</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>Mixture has not been tested</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>Mixture has not been tested</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>Mixture has not been tested</td>
</tr>
<tr>
<td>Relative density</td>
<td>Mixture has not been tested</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>no data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Mixture has not been tested</td>
</tr>
</tbody>
</table>

OTHER INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point / melting range</td>
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<td>Mixture has not been tested</td>
</tr>
</tbody>
</table>

SECTION 10: Stability and reactivity

Reactivity

None known.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

Hazardous reaction has not been reported.

Conditions to Avoid

No information available.

Incompatible Materials

No dangerous reaction known under conditions of normal use.

Hazardous decomposition products

No data available.
SECTION 11: Toxicological information

Information on toxicological effects

There is no evidence available indicating acute toxicity.

Principal Routes of Exposure, Potential health effects

- **Irritation**: Conclusive but not sufficient for classification
- **Corrosivity**: Conclusive but not sufficient for classification
- **Sensitisation**: Conclusive but not sufficient for classification
- **STOT - Single Exposure**: Conclusive but not sufficient for classification
- **STOT - Repeated Exposure**: Conclusive but not sufficient for classification
- **Carcinogenicity**: Conclusive but not sufficient for classification
- **Mutagenicity**: Conclusive but not sufficient for classification
- **Reproductive toxicity**: Conclusive but not sufficient for classification
- **Aspiration Hazard**: Conclusive but not sufficient for classification

SECTION 12: Ecological information

Toxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

- **Persistence and degradability**: No information available.
- **Bioaccumulative potential**: No information available.

Results of PBT and vPvB assessment

Not applicable.

Other adverse effects

No information available.

SECTION 13: Disposal considerations

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.
SECTION 14: Transport information

IATA / ADR / DOT-US / IMDG
Not regulated in the meaning of transport regulations.

UN Number Not applicable
UN proper shipping name Not applicable
Transport hazard class(es) Not applicable
Packing group Not applicable
Environmental Hazards Not applicable
Special precautions for user Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

SECTION 15: Regulatory information

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

Substances of Very High Concern
None.

Restricted substances under EC 1907/2006, Annex XVII
None.

Substances listed under Annex I of Regulation (EC) No 689/2008
None.

Restricted substances under Annex V of Regulation (EC) No 689/2008
None.

None.

German Water hazard classes (Wassergefährdungsklassen)
Not classified.

Other International Inventories
No information available

Chemical Safety Assessment
No Chemical safety assessment has been carried out.
## SECTION 16: Other information

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision number</td>
<td>4</td>
</tr>
<tr>
<td>Revision date</td>
<td>13-Oct-2016</td>
</tr>
</tbody>
</table>

### References
- ECHA: http://echa.europa.eu/
- LOLI database: https://www.chemadvisor.com/loli-database

### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

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