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

Identification of the substance or mixture

<table>
<thead>
<tr>
<th>Product code</th>
<th>10010023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>PBS, PH 7.4</td>
</tr>
</tbody>
</table>

Company/undertaking identification

Life Technologies
5791 Van Allen Way
PO Box 6482
Carlsbad, CA 92008
+1 760 603 7200

Life Technologies
5250 Mainway Drive
Burlington, ONT
CANADA L7L 6A4
800/263-6236

24 hour Emergency Response:
866-536-0631
301-431-8585
Outside of the U.S. +1-301-431-8585

Country specific Emergency Number (if available):
CHEMTREC Brazil (Rio De Janeiro) +(55)-2139581449 (português)

For in vitro diagnostic use.

SECTION 2: Hazards identification

GHS - Classification

Signal Word
Not Hazardous

Health hazards
Not Hazardous

Physical hazards
Not Hazardous

Principle Routes of Exposure

<table>
<thead>
<tr>
<th>Potential Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>eyes</td>
</tr>
<tr>
<td>Skin</td>
</tr>
<tr>
<td>inhalation</td>
</tr>
</tbody>
</table>

Revision date 29-Oct-2015
Product code 10010023
Product name PBS, PH 7.4

www.thermofisher.com
**Ingestion**

May be harmful if swallowed.

**Specific effects**

- **Carcinogenic effects**: None.
- **Mutagenic effects**: None.
- **Reproductive toxicity**: None.
- **Sensitization**: None.

**Target Organ Effects**

No known effects under normal use conditions.

**HMIS**

<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**SECTION 3: Composition/information on ingredients**

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

**SECTION 4: First aid measures**

**Skin contact**

Rinse cautiously with water for several minutes. If symptoms occur, obtain medical advice.

**Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

**Ingestion**

Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.

**Inhalation**

Remove to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

**Most important symptoms and effects, both acute and delayed**

None

**Notes to Physician**

Treat symptomatically.

**SECTION 5: Firefighting measures**

**Suitable extinguishing media**


**Special protective equipment for firefighters**

Wear self-contained breathing apparatus and protective suit.

**Specific hazards arising from the chemical**

Not known

**SECTION 6: Accidental release measures**

**Personal precautions**

Use personal protection equipment.

**Methods for cleaning up**

Soak up with inert absorbent material.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so.
See Section 12 for more information.

**SECTION 7: Handling and storage**

Handling
Always wear recommended Personal Protective Equipment. No special handling advices are necessary.

Storage
Keep in a dry, cool and well-ventilated place.

**SECTION 8: Exposure controls/personal protection**

**Exposure Limits**
We are not aware of any national exposure limit.

**Engineering measures**
Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment**
Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

**Respiratory protection**
In case of insufficient ventilation, wear suitable respiratory equipment.

**Hand protection**
Impervious gloves.

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

**Skin and Body Protection**
Lightweight protective clothing.

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

**Environmental exposure controls**
Prevent product from entering drains.

**SECTION 9: Physical and chemical properties**

**General information**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
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</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
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<tr>
<td>Odor Threshold</td>
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<tr>
<td>Boiling point / boiling range</td>
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<tr>
<td>Melting point / melting range</td>
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<tr>
<td>flash point</td>
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<tr>
<td>Autoignition Temperature</td>
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<tr>
<td>Evaporation rate</td>
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<tr>
<td>Flammability (solid, gas)</td>
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<tr>
<td>Water solubility</td>
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<td>Upper explosion limit</td>
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<td>Lower explosion limit</td>
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<tr>
<td>Partition coefficient: n-octanol/water</td>
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</tr>
<tr>
<td>Vapor Pressure</td>
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</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Revision date 29-Oct-2015
Product code 10010023
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SECTION 10: Stability and reactivity

Stability
Stable under normal conditions.

Materials to avoid
No dangerous reaction known under conditions of normal use.

Possibility of hazardous reactions
Hazardous reaction has not been reported.

Hazardous decomposition products
None under normal use conditions.

Polymerization
Hazardous polymerization does not occur.

Conditions to avoid
None under normal processing.

SECTION 11: Toxicological information

Acute Toxicity
Not Hazardous.

Principle Routes of Exposure
Potential Health Effects

eyes May cause eye irritation with susceptible persons.

Skin May cause skin irritation in susceptible persons.

inhalation May be harmful by inhalation.

Ingestion May be harmful if swallowed.

Carcinogenic effects None.

Mutagenic effects None.

Reproductive toxicity None.

Sensitization None.

Target Organ Effects No known effects under normal use conditions.

SECTION 12: Ecological information

Ecotoxicity
No information available.

Mobility
No information available.

Biodegradation
Inherently biodegradable.

Bioaccumulation
Material does not bioaccumulate.

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

pH value 7.4
SECTION 14: Transport information

IATA

<table>
<thead>
<tr>
<th>Proper Shipping Name</th>
<th>No dangerous good in sense of these transport regulations</th>
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</thead>
<tbody>
<tr>
<td>Hazard Class</td>
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</tr>
<tr>
<td>Subsidiary class</td>
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<tr>
<td>Packing group</td>
<td>None</td>
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<tr>
<td>UN-No</td>
<td>None</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>None</td>
</tr>
</tbody>
</table>

SECTION 15: Regulatory information

US Federal Regulations

SARA 313
This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain HAPs.

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class
Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16: Other information

Reason for revision
SDS sections updated.

For in vitro diagnostic use.

“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. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE”

End of Safety Data Sheet