**Product Name:** Gel Loading Dye, Purple (6X), no SDS  
**Catalog Number:** B7025S  
**Concentration:** 6 X Concentrate  
**Packaging Lot Number:** 10174285  
**Expiration Date:** 10/2025  
**Storage Temperature:** 25°C  
**Specification Version:** PS-B7025S v2.0  
**Composition (1X):** 3.3 mM Tris-HCl, 10 mM EDTA, 2.5 % Ficoll® 400, 0.02 % Dye 1, 0.0008 % Dye 2, (pH 8.0 @ 25°C)

### Gel Loading Dye, Purple (6X), no SDS Component List

<table>
<thead>
<tr>
<th>NEB Part Number</th>
<th>Component Description</th>
<th>Lot Number</th>
<th>Individual QC Result</th>
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</thead>
<tbody>
<tr>
<td>B7025SVIAL</td>
<td>Gel Loading Dye, Purple (6X), no SDS</td>
<td>10167589</td>
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</tbody>
</table>

### Assay Name/Specification

#### Exonuclease Activity (Radioactivity Release)

A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 10 µl of Gel Loading Dye, Purple (6X), no SDS incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.

#### Endonuclease Activity (Nicking)

A 50 µl reaction in CutSmart® Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 10 µl of Gel Loading Dye, Purple (6X), no SDS incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.

#### RNase Activity (Extended Digestion)

A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of Gel Loading Dye, Purple (6X), no SDS is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.

#### Non-Specific DNase Activity (16 Hour)

A 50 µl reaction in CutSmart® Buffer containing 1 µg of digested 1 kb Plus DNA Ladder DNA and a minimum of 10 µl of Gel Loading Dye, Purple (6X), no SDS incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.
This product has been tested and shown to be in compliance with all specifications.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.

Nancy Considine
Production Scientist
27 Oct 2022

Michael Tonello
Packaging Quality Control Inspector
08 Dec 2022