

## New England Biolabs Certificate of Analysis

**Product Name:** Gel Loading Dye, Purple (6X)  
**Catalog #:** B7024S  
**Concentration:** 6X Concentrate  
**Lot #:** 0221803  
**Assay Date:** 03/2018  
**Expiration Date:** 03/2021  
**Storage Temp:** 25°C  
**Composition (1X):** 3.3 mM Tris-HCl, 10 mM EDTA, 2.5 % Ficoll<sup>®</sup> 400, 0.08 % SDS, 0.02 % Dye 1, 0.0008 % Dye 2, (pH 8.0 @ 25°C)  
**Specification Version:** PS-B7024S v1.0  
**Effective Date:** 16 Feb 2018

Assay Name/Specification (minimum release criteria)	Lot #0221803
<b>Endonuclease Activity (Nicking)</b> - A 50 µl reaction in CutSmart <sup>®</sup> Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 10 µl of Gel Loading Dye, Purple (6X) incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	<b>Pass</b>
<b>Exonuclease Activity (Radioactivity Release)</b> - A 50 µl reaction in CutSmart <sup>®</sup> Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] <i>E. coli</i> DNA and a minimum of 10 µl of Gel Loading Dye, Purple (6X) incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	<b>Pass</b>
<b>Non-Specific DNase Activity (16 Hour)</b> - A 50 µl reaction in CutSmart <sup>®</sup> Buffer containing 1 µl of digested 2-Log Ladder DNA and a minimum of 10 µl of Gel Loading Dye, Purple (6X) incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	<b>Pass</b>
<b>RNase Activity (Extended Digestion)</b> - 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) 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.	<b>Pass</b>



Authorized by  
Derek Robinson  
16 Feb 2018



Inspected by  
Tony Spear-Alfonso  
06 Apr 2018

