

# Gel Loading Buffer II

Store at  $-20^{\circ}\text{C}$ .

<b>Catalog #:</b>	AM8546G	AM8547
<b>Volume:</b>	1.4 mL	10 mL
<b>Product Description:</b>	Gel Loading Buffer II is a 1–2X solution of 95% Formamide, 18 mM EDTA and 0.025% each of SDS, Xylene Cyanol, and Bromophenol Blue for use in polyacrylamide urea gel (denaturing) and non-denaturing agarose gel electrophoresis of nucleic acids.	
<b>Appearance:</b>	Dark blue solution	
<b>Storage Conditions:</b>	Store at $-20^{\circ}\text{C}$ .	

## USER INFORMATION

**General Information:** Ambion Gel Loading Buffer II is a 1–2X solution suitable for use in polyacrylamide urea gel (denaturing) and non-denaturing agarose gel electrophoresis of nucleic acids. This solution is the same loading buffer provided in the Ambion RPA Kits (Cat #AM1410-AM1415).

**Applications:**

**For Polyacrylamide Urea Gel Electrophoresis**

1. Mix sample with an equal volume of Gel Loading Buffer II. Vortex briefly.
2. Centrifuge briefly to bring contents of tubes to the bottom.
3. Heat to  $95^{\circ}\text{C}$  for 5 min to denature any secondary structure.
4. Load directly (while still hot) on the gel using nuclease-free pipette tips. To keep the samples as dense as possible, make sure there is no air trapped in the end of the pipette tip, place the tip just inside the top of the well, expel the sample slowly, then gently raise the pipette out of the well.

**For Non-denaturing Agarose Gel Electrophoresis**

Follow the protocol above, except do not heat to  $95^{\circ}\text{C}$  for 5 min (step 3).

## QUALITY CONTROL

<b>Nonspecific Endonuclease Activity:</b>	Meets or exceeds specification when a sample is incubated for 14–16 hr with 300 ng supercoiled plasmid DNA and analyzed by agarose gel electrophoresis.
<b>Exonuclease Activity:</b>	Meets or exceeds specification when a sample is incubated for 14–16 hr with 40 ng $^{32}\text{P}$ -labeled <i>Sau3A</i> fragments of pUC19 and analyzed by PAGE.
<b>RNase Activity:</b>	Meets or exceeds specification when a sample is incubated for 14–16 hr with 25 ng $^{32}\text{P}$ -labeled RNA and analyzed by PAGE.
<b>Functional Testing:</b>	Using Gel Load Buffer II, nucleic acid samples are analyzed by PAGE and a non-denaturing agarose gel. All samples yield bands that are sharp and intact.

## OTHER INFORMATION

**Material Safety Data Sheets:** Material Safety Data Sheets (MSDSs) can be printed or downloaded from product-specific links on our website at the following address: [www.ambion.com/techlib/msds](http://www.ambion.com/techlib/msds). Alternatively, e-mail your request to [MSDS\\_Inquiry\\_CCRM@appliedbiosystems.com](mailto:MSDS_Inquiry_CCRM@appliedbiosystems.com). Specify the catalog or part number(s) of the product(s), and we will e-mail the associated MSDSs unless you specify a preference for fax delivery. For customers without access to the internet or fax, our technical service department can fulfill MSDS requests placed by telephone or postal mail. (Requests for postal delivery require 1–2 weeks for processing.)

**Warranty and Liability:** *For research use only. Not for use in diagnostic procedures.*

Applied Biosystems is committed to delivering superior product quality and performance, supported by industry-leading global service and technical support teams. Warranty information for the accompanying consumable product is available at [www.ambion.com/info/warranty](http://www.ambion.com/info/warranty) in "Limited Warranty for Consumables," which is subject to the exclusions, conditions, exceptions, and limitations set forth under the caption "EXCLUSIONS, CONDITIONS, EXCEPTIONS, AND LIMITATIONS" in the full warranty statement. Please contact Applied Biosystems if you have any questions about our warranties or would like information about post-warranty support.

Information in this document is subject to change without notice. Applied Biosystems assumes no responsibility for any errors that may appear in this document.

Applied Biosystems disclaims all warranties with respect to this document, expressed or implied, including but not limited to those of merchantability or fitness for a particular purpose. In no event shall Applied Biosystems be liable, whether in contract, tort, warranty, or under any statute or on any other basis for special, incidental, indirect, punitive, multiple or consequential damages in connection with or arising from this document, including but not limited to the use thereof.

**Trademarks, Patents, and  
Licensing:**

Applied Biosystems, AB (Design), and Ambion are registered trademarks of Applied Biosystems Corporation or its subsidiaries in the US and/or certain other countries. All other trademarks are the sole property of their respective owners.

© 2007 Ambion, Inc. All rights reserved. 4386611B