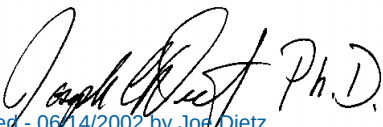


**MP Biomedicals, LLC**29525 Fountain Parkway
Solon, Ohio 44139Telephone: 440/337-1200
Toll Free: 800/854-0530Fax: 440/337-1180
web: www.mpbio.com

Certificate of Analysis

Product Description: Tris, ultra pure grade.**Catalog Number:** 103133.**Lot:** R13759.**Formula:** $C_4H_{11}NO_3$ **CAS #:** 77-86-1**Physical Description:** White Crystalline Powder**Formula Weight:** 121.14**Storage:** Room Temperature, desiccate

Test	Specification	Result
Identity Test	Passes	Passes
Purity	$\geq 99.95\%$	100%
FTIR	Conforms to Standard	Conforms to Standard
Melting Point	165-175°C	171 - 172°C
pH (5% aq soln)	10-11.5	10.6
OD260 nm (5% aq soln)	≤ 0.1	0.01
Loss on Drying	$\leq 1\%$	0.0%
Solubility (40% aq soln)	Clear, Colorless Solution	Passes


Approved - 06/14/2002 by Joe Dietz
MP Biomedicals, LLC.
Technical Director

This is an electronically generated document

<mailto:biotech@mpbio.com><http://www.mpbio.com>

Online Ordering, MSDSs, certificates of analysis and data sheets now available on our web site

Technical Service: 1-800-279-5490 (440-337-1200) Customer Service: 1-800-854-0530 (440-337-1200)