

Gojira Fine Chemicals, LLC

Quality Products & Services Meeting Customer Needs

5386 Majestic Parkway, Suite 7, Bedford Heights, OH 44146

www.gojirafc.com ● sales@gojirafc.com

Certificate of Analysis

Spermidine Trihydrochloride

Catalog Number:ST1015Lot Number:1010602CAS Number:334-50-9

Synonym(s): *N*-(3-Aminopropyl)-1,4-butanediamine trihydrochloride

Molecular Formula: $C_7H_{19}N_3 - 3HCI$

Molecular Weight:254.63Storage: $15^{\circ}\text{C} - 30^{\circ}\text{C}$ Date of Manufacture:August 2, 2016Retest Date:August 1, 2018

Test	Specification	Result
Appearance	White to off-white crystalline powder	Conforms
Assay (Titration)	99.0 – 101.0%	99.9%
Identification (FTIR)	To match reference spectrum	Conforms
Melting Point	≥ 250°C	267°C
Solubility (100mg/mL)	Clear & colorless to slight color	Conforms
рН	3.0 – 6.0	4.2
Moisture (KF)	≤ 1.0%	0.16%

Approved by: Date: October 10, 2016

John Grubb, PhD

Gojira Fine Chemicals, LLC

Quality Manager

Tel: 440-539-7033 Fax: 888-211-5523

john@gojirafc.com