CERTIFICATE OF ANALYSIS

Product Description	DL-DITHIOTHREITOL; DTT
Product Number	D259
Lot Number	13J0259004
Storage Temperature	2-6 °C
Molecular Weight	154.2
Formula	$C_4H_{10}O_2S_2$
CAS Number	3483-12-3

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Soluble in Water @ 10 mg/mL	Passes
pH	Under Development	5.8
Physical Appearance		
Color*	RM-1 to RM-3, or RM-31	RM-31 White
Texture	Fine Powder, may form clumps	Fine Powder, form clumps
Solution Appearance		
Clarity	Clear	Clear
Color	Colorless	Colorless
Average Time to Dissolve	Within 5 min	Passes
Purity	Minimum 99.0%	99.10%
FTIR	Conforms to Structure	Passes

* Product color based upon comparisons between sample and standardized color wheel (Benjamin Moore® Color Preview™).

The material described in this certificate is synthetic. No animal- or plant-derived components were used in the manufacture of this product.

***Phyto*Technology Laboratories® provides the above information intended to be used only as a guide to the appropriate handling of this material by a properly trained person. *Phyto*Technology Laboratories® shall not be held liable for any damage resulting from handling or from contact with the above product. This product is intended for LABORATORY USE ONLY. Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticidal products, food additives or as household chemicals.**

Recommended Shelf Life Date: September 2018

Gary Seckinger, PhD

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