

## Certificate of Analysis

**PRODUCT:** **DTT**, Dithiothreitol, Cleland's Reagent  
**C<sub>4</sub>H<sub>10</sub>O<sub>2</sub>S<sub>2</sub>**, M.W. 154.25, CAS# [3483-12-3]

**PRODUCT NUMBER:** C-1029

**LOT NUMBER:** L1576

	<u>SPECIFICATION</u>	<u>RESULTS</u>
<b>APPEARANCE:</b>	White crystalline powder	Conforms
<b>SOLUBILITY</b> (10% solution in water):	Clear and colorless	Conforms
<b>MELTING POINT:</b>	42±2°C	Pass
<b>I.R.:</b>	Consistent with assigned structure	Conforms
<b>TITRATION ex -SH</b> (Iodometric):	≥99.0%	Pass
<b>PURITY</b> (TLC):	One spot	Conforms
<b>U.V. ASSAYS:</b>		
<b><u>(1) 1% SOLUTION:</u></b>		
<b>A<sub>280</sub></b>	<0.067	0.014
<b>A<sub>305</sub></b>	<0.050	0.007
<b><u>(2) 0.02 M SOLUTION:</u></b>		
<b>A<sub>283</sub></b>	<0.040	Pass
<b><u>(3) 1 M NEUTRAL SOLUTION:</u></b>		
<b>A<sub>400</sub></b>	<0.062	0.018
<b>A<sub>405</sub></b>	<0.062	0.017
<b>OD 700-500 nm</b>	≤0.035	0.012
<b>LOSS ON DRYING:</b>	<0.50%	Pass
<b>% OXIDIZED DTT:</b>	<0.50%	Pass
<b>COUNTRY of ORIGIN:</b>	Canada	
<b>STORAGE &amp; HANDLING:</b>	Store desiccated at +4°C under inert gas.	

**WARNING: HARMFUL! VERY HYGROSCOPIC!**

CAUTION: For research use only. Not for human or drug use. The pharmacological and toxicological properties of this product have not been fully investigated. Use caution when handling. Do not use this compound if you are not fully trained or are unaware of the hazards involved.

Verified: KLS