

3050 Spruce Street, Saint Louis, MO 63103, USA

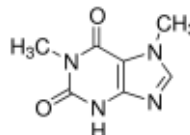
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## Product Specification

Product Name:  
1,7-Dimethylxanthine - ~98%, solid

Product Number: **D5385**  
CAS Number: 611-59-6

Formula: C<sub>7</sub>H<sub>8</sub>N<sub>4</sub>O<sub>2</sub>  
Formula Weight: 180.16 g/mol



TEST	Specification
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Appearance (Form)	Powder
Appearance (Colour)	White to White w/ Yellow Cast
Solubility (Solvent)	NH <sub>4</sub> OH 1N
Solubility (Conc)	49.00 - 51.00 mg/ml
Solubility (Turbidity)	Clear
Solubility (Color)	Colorless to Faint Yellow
Elemental Anal. (%C anhydrous)	46.17 - 47.17 %
Elemental Anal. (%N anhydrous)	30.60 - 31.60 %
Purity (TLC)	≥ 97.00 %
NMR (Solvent)	DMSO-d <sub>6</sub> /D <sub>2</sub> O
Identity by NMR	Consistent
UV (Solvent)	0.1M Phosphate Buffer PH 6
UV (Lambda max 1)	267 - 271 nm
UV (EmM at Lambda max 1)	9.00 - 11.00
Recommended Retest Period	-----
3 Years	

Specification: PRE.1.ZQ5.1000002216

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at [Sigma-Aldrich.com](http://Sigma-Aldrich.com). For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.