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Certificate of Analysis

Product Name:

5,10,15,20-Tetraphenyl-21H, 23H-porphine-p,p',p'',p'''-tetrasulfonic acid tetrasodium hydrate

Product Number: 389404
Lot Number: MKBK1670V
Brand: SIAL
CAS Number: 652154-11-5
MDL Number: MFCD00192496
Formula: C₄₄H₂₆N₄Na₄O₁₂S₄ · xH₂O
Formula Weight: 1,022.92 g/mol
Quality Release Date: 11 APR 2012

Test	Specification	Result
Appearance (Color)	Purple to Very Dark Purple and Black	Black
Appearance (Form)	Powder or Crystals or Powder with Chunk(s) or Crystals with Chunk(s)	Powder
Infrared spectrum	Conforms to Structure	Conforms
Wavelength	411 - 417 nm	414 nm
0.01g/L, Methanol		
Extinction Coefficient	≥ 250000	264746
Carbon (Dry Basis)	42.7 - 60.7 %	46.0 %
Nitrogen (Dry Basis)	4.5 - 6.5 %	4.8 %
Sulfur (Dry Basis)	10.3 - 14.7 %	10.4 %
Loss on Drying		5.1 %
Typically 10% - 20%, 120°C		



Jamie Gleason, Manager
Quality Control
Milwaukee, Wisconsin US

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. 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.