

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com

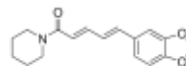
Email USA: techserv@sial.com

Outside USA: eurtechserv@sial.com

## Certificate of Analysis

Product Name:  
Piperine -  $\geq 97\%$ , FG

**Product Number:** W290904  
**Batch Number:** MKBV7657V  
**Brand:** ALDRICH  
**CAS Number:** 94-62-2  
**MDL Number:** MFCD00005839  
**Formula:** C<sub>17</sub>H<sub>19</sub>NO<sub>3</sub>  
**Formula Weight:** 285.34 g/mol  
**Quality Release Date:** 16 JUL 2015  
**Expiration Date:** MAY 2020



Test	Specification	Result
Appearance (Color)	Off White to Yellow and Faint Beige to Beige	Faint Yellow
Appearance (Form)	Powder or Crystals or Granules	Powder
Melting Point	129 - 135 °C	129 °C
Infrared Spectrum	Conforms to Structure	Conforms
Carbon	69.4 - 73.7 %	71.2 %
Nitrogen	4.5 - 5.3 %	4.9 %
Purity (HPLC)	$\geq 97.0$ %A	97.3 %A
Solubility (Turbidity) c = 5%; Chloroform	Clear to Hazy	Slightly Hazy
Solubility (Color)	Colorless to Dark Yellow	Dark Yellow
Arsenic (As)	$\leq 3$ ppm	< 1 ppm
Cadmium (Cd)	$\leq 1$ ppm	< 1 ppm
Mercury (Hg)	$\leq 1$ ppm	< 1 ppm
Lead (Pb)	$\leq 10$ ppm	< 1 ppm
Expiration Date Period 5 Years	-----	-----

Ali Ataei, Manager  
Quality Control

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.

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## Certificate of Analysis

**Product Number:** W290904  
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Milwaukee, WI US

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