

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: [www.sigmaldrich.com](http://www.sigmaldrich.com)Email USA: [techserv@sial.com](mailto:techserv@sial.com)Outside USA: [eurtechserv@sial.com](mailto:eurtechserv@sial.com)

## Product Specification

Product Name:  
Iron(III) oxide - nanopowder, <50 nm particle size

**Product Number:** 544884  
**CAS Number:** 1309-37-1  
**MDL:** MFCD00011008  
**Formula:** Fe<sub>2</sub>O<sub>3</sub>  
**Formula Weight:** 159.69 g/mol

Fe<sub>2</sub>O<sub>3</sub>

TEST	Specification
------	---------------

Appearance (Color)	Conforms to Requirements
Red-Brown to Brown	
Appearance (Form)	Powder
X-Ray Diffraction	Conforms to Structure
Titration by Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	68.2 - 71.7 %
% Fe	
Size	≤ 50 nm

Specification: PRD.0.ZQ5.10000017007

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.