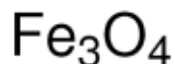


Certificate of Analysis

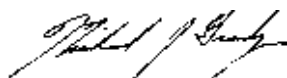
Product Name:

Iron oxide(II,III), magnetic nanoparticles solution – 20 nm avg. part. size, 5 mg/mL in H₂O

Product Number: 725366
Batch Number: MKCP0743
Brand: ALDRICH
Formula: Fe₃O₄
Formula Weight: 231.53 g/mol
Quality Release Date: 25 FEB 2021



Test	Specification	Result
Appearance (Color)	Brown or Black	Brown
Appearance (Form)	Liquid	Liquid
ICP Major Analysis	Confirmed	Confirmed
Confirms Iron Component		
Concentration	Conforms	Conforms
5 mg/ml in Water		
Particle Size	Conforms	Conforms
17-23 nm (TEM)		
Magnetization	Conforms	Conforms
> 20 emu/g At 4500Oe		



Michael Grady, Manager
 Quality Control
 Milwaukee, WI 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.

