

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-02-15 13:18:48  
Date of Next Testing: 2026-02-14 13:18:48  
Product Name: **Praseodymium oxide**  
CAS Number: 12037-29-5  
Specifications & Purity: nanopowder,50nm,99.5% metals basis  
Lot #: B2212030  
SKU #: **P105311**  
**Analysis: 074199**

Parameter	Limit Values	Result
Trace Rare Earth Analysis	0-5000 (ppm)	3774.00 ppm
Purity(Based On Trace Rare Earth Analysis)	99.5-100 (%)	99.62 %
Particle size	45-55 (nm)	50.00 nm
pr (Complexometric titration)	80.7-85.7 (%)	80.70 %
Appearance (P105311)	Brown to black powder	Brown to black powder
Form	spherical	spherical
ICP: Confirms Praseodymium Component	Confirmed	Confirmed
X-Ray Diffraction	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager