



Beijing Yishengqiang New Materials Technology Co., Ltd.

ADVANCED MATERIALS OVERVIEW

Company & Product Brief



CURRENT PROMOTION FOCUS:

3N & 4N

SCANDIUM OXIDE



ABOUT US



INTEGRATED HIGH-TECH ENTERPRISE

Combining R&D, production, sales and engineering services.



CORE BUSINESSES

Advanced polymer composites and high-purity scandium oxide.



COMMITTED TO EXCELLENCE

Driven by innovation, focused on quality, and dedicated to reliable supply.



TRUSTED & RECOGNIZED

Backed by strong enterprise credentials and customer-focused service.

INNOVATION • QUALITY • RELIABILITY

Advanced Materials. Reliable Solutions.



Scandium Oxide Overview

3N & 4N AT A GLANCE

Scandium Oxide (Sc_2O_3) is a white crystalline rare-earth powder with excellent thermal stability and chemical stability. It is widely used in aerospace, aluminum-scandium alloys, solid oxide fuel cells, semiconductors, optoelectronics and advanced materials.



3N SCANDIUM OXIDE INDUSTRIAL HIGH-PURITY GRADE



- ✓ Purity $\geq 99.9\%$
- ✓ Low impurity levels for industrial use
- ✓ Cost-effective with scalable supply

VS

4N SCANDIUM OXIDE ULTRA-HIGH-PURITY GRADE



- ✓ Purity $\geq 99.99\%$
- ✓ Tight control of trace impurities
- ✓ Designed for advanced technology applications

WHY OUR SCANDIUM OXIDE?



PROPRIETARY PURIFICATION

Advanced purification technology ensures high purity and low impurity levels.



CONSISTENT BATCH QUALITY

Strict quality control with full ICP reports for every batch.



CUSTOMIZABLE SOLUTIONS

Flexible particle size, packaging and purity options to meet your specific needs.



RELIABLE SUPPLY SUPPORT

Stable production and inventory from kilogram to ton scale with on-time delivery.



3N Scandium Oxide (Purity $\geq 99.9\%$)



INDUSTRIAL HIGH-PURITY GRADE

Consistent purity and performance for demanding industrial applications and large-scale production.

KEY ADVANTAGES



COST-EFFECTIVE

Optimized production process for competitive pricing in large-volume procurement.



STABLE QUALITY

Tight control of purity and impurities ensures consistent performance batch after batch.



THERMAL & CHEMICAL STABILITY

Excellent stability under high temperature and in corrosive environments.



SCALABLE SUPPORT

Flexible capacity and reliable supply to support industrial growth and project expansion.

TECHNICAL SPECIFICATION

PARAMETER	SPECIFICATION
Scandium Oxide Purity (Sc_2O_3)	$\geq 99.9\%$
Total Impurities	$\leq 0.1\%$ (Fe/Si/Ca etc.)
Median Particle Size (D50)	10–50 μm (customizable)
Moisture	$\leq 0.2\%$

TYPICAL APPLICATIONS



METALLURGY

Used in specialty alloys to improve strength, high-temperature stability and grain refinement.



CHEMICALS

Catalysts and chemical intermediates for advanced processes.



ALUMINUM-SCANDIUM ALLOYS

Enhances strength, weldability and corrosion resistance in high-performance alloys.



SOLID OXIDE FUEL CELLS (SOFCs)

Key material for electrolytes and functional layers to improve efficiency and durability.



GENERAL INDUSTRIAL ADVANCED MATERIALS

Applied in ceramics, coatings, optical materials and other high-end applications.



4N Scandium Oxide (Purity $\geq 99.99\%$)

ULTRA-HIGH-PURITY ELECTRONIC GRADE
FOR ADVANCED TECHNOLOGY

Engineered for mission-critical applications where
purity, performance and reliability matter most.



KEY ADVANTAGES



ULTRA-HIGH PURITY
Purity $\geq 99.99\%$ with
tightly controlled
impurities at ppm level.



**STABLE OPTOELECTRONIC
PERFORMANCE**
Excellent consistency for
reliable device performance
and process yield.



**STRONG THERMAL
STABILITY**
Maintains performance in
high-temperature and
demanding environments.

TECHNICAL SPECIFICATIONS

ITEM	SPECIFICATION
Total Rare-Earth Oxide Purity (TREO)	$\geq 99.99\%$
Non-Rare-Earth Impurity (Fe_2O_3)	≤ 5 ppm
Non-Rare-Earth Impurity (SiO_2)	≤ 10 ppm
Non-Rare-Earth Impurity (CaO)	≤ 5 ppm
Median Particle Size (D50)	1–10 μm (customizable)

APPLICATIONS



Aerospace & Aluminum-Scandium Alloys
Lightweight, high-strength structural materials
for aerospace and transportation.



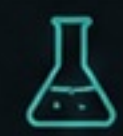
Solid Oxide Fuel Cells (SOFCs)
Enhances electrolyte performance and
operational stability.



Semiconductors
High-purity material for advanced electronic
components and processes.



Optoelectronics
Supports high-performance lasers, LEDs
and optical devices.



Advanced Research Materials
Enabling next-generation scientific
discovery and innovation.

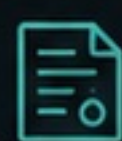
QUALITY & SERVICE



Laboratory-Grade Testing
Rigorous testing with advanced
analytical instruments.



Full-Process Quality Control
Strict control from raw
materials to finished product.



Batch ICP Report
Comprehensive ICP analysis
report with every batch.



**Responsive Custom
Specifications**
Flexible particle size and
specifications to meet
your needs.



Supply Support
Reliable supply
from kilogram to
ton scale.



CONTACT US FOR SAMPLES, TECHNICAL DATA AND QUOTATIONS.

Ganzhou Qiuzhen Technology Co., Ltd.

ANALYSIS REPORT

Date Sample Received: 17 June 2026
Customer: Ganzhou Hongsheng Scandium-Titanium
Sample Name: Scandium Oxide
Sample / Raw Material No.: 3N
Report Date: 18 June 2026

Test Item	Result	Unit	Test Item	Result	Unit
La ₂ O ₃ /TREO	0.0005	%	Actual REO	92.28	%
CeO ₂ /TREO	0.0005	%	L.O.I.	1.47	%
Pr ₆ O ₁₁ /TREO	<0.0003	%	Moisture	0.18	%
Nd ₂ O ₃ /TREO	<0.0003	%	Al ₂ O ₃	Not tested	%
Sm ₂ O ₃ /TREO	<0.0003	%	CaO	Not tested	%
Eu ₂ O ₃ /TREO	<0.0003	%	Cl ⁻	Not tested	%
Gd ₂ O ₃ /TREO	<0.0003	%	SiO ₂	Not tested	%
Tb ₄ O ₇ /TREO	<0.0003	%	Fe ₂ O ₃	Not tested	%
Dy ₂ O ₃ /TREO	0.0030	%			
Ho ₂ O ₃ /TREO	0.0009	%			
Er ₂ O ₃ /TREO	0.0040	%			
Tm ₂ O ₃ /TREO	0.0004	%			
Yb ₂ O ₃ /TREO	0.0050	%			
Lu ₂ O ₃ /TREO	0.0008	%			
Y ₂ O ₃ /TREO	0.032	%			
Sc ₂ O ₃ /TREO	99.95	%			

Prepared by: Lai **Analysts:** Zhang, Liu, Wu, Lan **Reviewed by:** Zhang Yidong

1. This analysis report is valid only for the submitted sample. It reports analytical results for the elements/items tested and is not a certificate for public or commercial certification purposes. It is intended only for research, teaching, internal quality control and similar reference use. The laboratory does not accept liability for losses arising from use beyond these purposes.

2. Analytical data are retained for three months. Any objection to the results should be raised within fifteen days from the report date; otherwise, the results will be deemed accepted.

3. The sample is retained for one month from the date of receipt, except for solutions, readily oxidised metals, air-sensitive samples and other unsuitable materials. It will be disposed of after the retention period.

Address: No. 42, Zhanggongwang Road, Zhanggong District, Ganzhou, Jiangxi, China

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English translation prepared from the Chinese-language analysis report supplied by the customer. In case of discrepancy, the original Chinese report prevails.

Ganzhou Qiuzhen Technology Co., Ltd.

ANALYSIS REPORT

Date Sample Received: 17 June 2026
Customer: Ganzhou Hongsheng Scandium-Titanium
Sample Name: Scandium Oxide
Sample / Raw Material No.: 4N
Report Date: 18 June 2026

Test Item	Result	Unit	Test Item	Result	Unit
La ₂ O ₃ /TREO	<0.0003	%	Actual REO	92.07	%
CeO ₂ /TREO	<0.0003	%	L.O.I.	0.64	%
Pr ₆ O ₁₁ /TREO	<0.0003	%	Moisture	0.31	%
Nd ₂ O ₃ /TREO	<0.0003	%	Al ₂ O ₃	Not tested	%
Sm ₂ O ₃ /TREO	<0.0003	%	CaO	Not tested	%
Eu ₂ O ₃ /TREO	<0.0003	%	Cl ⁻	Not tested	%
Gd ₂ O ₃ /TREO	<0.0003	%	SiO ₂	Not tested	%
Tb ₄ O ₇ /TREO	<0.0003	%	Fe ₂ O ₃	Not tested	%
Dy ₂ O ₃ /TREO	<0.0003	%			
Ho ₂ O ₃ /TREO	<0.0003	%			
Er ₂ O ₃ /TREO	<0.0003	%			
Tm ₂ O ₃ /TREO	<0.0003	%			
Yb ₂ O ₃ /TREO	<0.0003	%			
Lu ₂ O ₃ /TREO	<0.0003	%			
Y ₂ O ₃ /TREO	<0.0003	%			
Sc ₂ O ₃ /TREO	>99.99	%			

Prepared by: Lai **Analysts:** Zhang, Liu, Wu, Lan **Reviewed by:** Zhang Yidong

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