

## Certificate of Analysis

Product Name: Ytterbium Oxalate Hydrate (Yb<sub>2</sub>(C<sub>2</sub>O<sub>4</sub>)<sub>3</sub>·xH<sub>2</sub>O) Powder  
Purity: 99.99% REO  
Lot Number: OH70-230815  
Date: 08/15/2023

### Test Result

TREO (%)	>=44.25%	Yb <sub>2</sub> O <sub>3</sub> /TREO (%)	>=99.99%
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Rare Earth Impurities ( <b>Max%</b> )		Non-Rare Earth Impurities ( <b>Max%</b> )	
La <sub>2</sub> O <sub>3</sub>	0.0005	Fe <sub>2</sub> O <sub>3</sub>	0.0005
CeO <sub>2</sub>	0.0005	CaO	0.001
Pr <sub>6</sub> O <sub>11</sub>	0.0005	Cl-	0.003
Nd <sub>2</sub> O <sub>3</sub>	0.0005	SiO <sub>2</sub>	0.001
Sm <sub>2</sub> O <sub>3</sub>	0.0005	PbO	0.001
Eu <sub>2</sub> O <sub>3</sub>	0.0005		
Gd <sub>2</sub> O <sub>3</sub>	0.0005		
Tb <sub>4</sub> O <sub>7</sub>	0.0005		
Dy <sub>2</sub> O <sub>3</sub>	0.0005		
Ho <sub>2</sub> O <sub>3</sub>	0.0005		
Er <sub>2</sub> O <sub>3</sub>	0.0005		
Tm <sub>2</sub> O <sub>3</sub>	0.0005		
Lu <sub>2</sub> O <sub>3</sub>	0.0005		
Y <sub>2</sub> O <sub>3</sub>	0.001		

Stanford Advanced Materials

By Andrew