



# CERTIFICATE OF ANALYSIS

The Power to Question

Catalog Number: sc-252554  
Lot Number: SAMPLE  
Product Name: Cerium(III) chloride heptahydrate  
CAS Number: 18618-55-8  
Molecular Formula:  $\text{CeCl}_3 \cdot 7\text{H}_2\text{O}$   
Molecular Weight: 372.58

| Test                        | Specification  | Result             |
|-----------------------------|--|--------------------|
| Appearance                  | White to light yellow crystals or crystalline powder | Colorless crystals |
| Water Insoluble Matter      | $\leq 0.5\%$   | 0.12%              |
| Ammonium                    | $\text{NH}_4 \leq 0.05\%$                            | 0.01%              |
| Calcium oxide               | $\text{CaO} \leq 0.05\%$                             | 0.0045%            |
| Cerium (IV) oxide           | $\text{CeO}_2 \geq 99\%$                             | Complies           |
| Iron (III) Oxide            | $\text{Fe}_2\text{O}_3 \leq 0.05\%$                  | 0.0014%            |
| Lanthanum oxide             | $\text{La}_2\text{O}_3 \leq 0.1\%$                   | 0.06%              |
| Neodymium (III) oxide       | $\text{Nd}_2\text{O}_3 \leq 0.05\%$                  | 0.01%              |
| Nitrate                     | $\text{NO}_3 \leq 0.05\%$                            | 0.01%              |
| Praseodymium (III,IV) Oxide | $\text{Pr}_6\text{O}_{11} \leq 0.05\%$               | 0.01%              |
| Samarium (III) oxide        | $\text{Sm}_2\text{O}_3 \leq 0.05\%$                  | 0.01%              |
| Silicon dioxide             | $\text{SiO}_2 \leq 0.05\%$                           | 0.005%             |
| Sulfate                     | $\text{SO}_4 \leq 0.05\%$                            | 0.022%             |
| Ytterbium (III) oxide       | $\text{Y}_2\text{O}_3 \leq 0.05\%$                   | 0.01%              |

Satisfaction Guarantee: We appreciate your business and are committed to providing the highest level of quality and service. Any product that does not meet the performance standards indicated in our product literature will be replaced at no charge. Our policy is valid for one year from the date of your purchase.

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