



# GNPGraystar

Specialty Materials

AN ISO 9001 CERTIFIED COMPANY



## TECHNICAL DATA SHEET

### Submicron High Purity Aluminum Oxide

#### Typical Chemistry

	CER-LAB	CER-LAB-T
Aluminum Oxide ( $\text{Al}_2\text{O}_3$ )	$\geq 99.95 \%$	$\geq 99.95 \%$
Iron Oxide ( $\text{Fe}_2\text{O}_3$ )	$\leq 0.01 \%$	$\leq 0.01 \%$
Silicon Dioxide ( $\text{SiO}_2$ )	$\leq 0.02 \%$	$\leq 0.02 \%$
Sodium Oxide ( $\text{Na}_2\text{O}$ )	$\leq 0.02 \%$	$\leq 0.02 \%$
Calcium Oxide ( $\text{CaO}$ )	$\leq 0.02 \%$	$\leq 0.02 \%$
Magnesium Oxide ( $\text{MgO}$ )	$\leq 0.005 \%$	$\leq 0.005 \%$
Moisture ( $\text{H}_2\text{O}$ )	$\leq 0.2 \%$	$\leq 0.2 \%$

#### Physical Characteristics

	CER-LAB	CER-LAB-T
Crystal Form:	Alpha-Alumina	Alpha-Alumina
pH:	7 - 9	7 - 9
Specific Surface Area (BET):	5 - 7	4 - 5
d10	$\geq 0.30$	$\geq 0.30$
d50	0.6 - 1.0	0.6 - 1.0
d90	$\leq 1.60$	$\leq 1.60$

#### Description:

GNPGraystar's CER-LAB and CER-LAB-T submicron powders are high purity calcined aluminum oxide powders designed to excel across a broad range of applications.

These powders offer a high degree of chemical inertness, high melting point, very low electrical conductivity, and excellent hardness.

CER-LAB-T has a higher purity, lower surface area, and a denser crystal structure than the standard CER-LAB product which allows for a lower degree of water absorption.

#### Applications:

GNPGraystar's CER-LAB and CER-LAB-T submicron powders are used for: thermal management, polishing, technical ceramics, lithium ion diaphragms, and other various applications.

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