

AEROXIDE® Alu C

Highly dispersed fumed aluminium oxide (Al₂O₃)

Characteristic physico-chemical data

Properties and test methods	Unit	Value
Specific surface area (BET)	m ² /g	85 - 115
pH value in 4% dispersion		4.5 - 5.5
Loss on drying* 2 hours at 105 °C	%	≤ 5.0
Tamped density*	g/l	approx. 50
Al ₂ O ₃ content based on ignited material	%	≥ 99.8
Sieve residue (by Mocker 45 µm)	%	≤ 0.050
* ex plant The data represents typical values (no product specification)		

Registrations (substance or product components)

AEROXIDE® Alu C

CAS-No.	1344-28-1
REACH (Europe)	registered
TSCA (USA) DSL (Canada)	registered
ENCS (Japan) IECSC (China) KECI (Korea) CSNN (Taiwan) PICCS (Philippines)	registered
AICS (Australia) NZIoC (New Zealand)	registered

AEROXIDE® Alu C is a fine-particulate, pure aluminium oxide (Al₂O₃) with high specific surface area and marked aggregate and agglomerate structure. Because of its high purity and low water content, the product can be used well as an additive to anorganic materials, for heat insulation, and also as a catalyst substrate. The positive surface charge can be used to control the electrostatic charge.

Applications and properties

Properties

- High specific surface area and high purity
- Low water content
- Crystalline Al₂O₃ with γ-/δ structure
- Very high thermal and chemical stability
- Positive surface charge

Applications

- In ceramic materials as a bonding agent and for control of sintering activity
- Filler in thermoplastic polymers, silicones, and composite materials to control density, heat conductivity, and dielectric characteristics
- Control of electric charging and triboelectric processes
- Flow regulation of fine particulate organic and inorganic materials with and without electrostatic charging
- Efficient catalyst substrate with good thermal and hydrothermal stability
- Improved gloss, ink absorption, and color brilliance of photo inkjet media
- Multiplies the lifetime of fluorescent tubes and energy-saving lamps
- Ceramic coating for separators in Li-ion batteries to increase safety and life-time

Packaging and storage

AEROXIDE® Alu C is supplied in multiple layer 10 kg paper bags. We recommend to store the product in closed containers under dry conditions and to protect the material from volatile substances. AEROXIDE® Alu C should be used within 2 years after production.

Safety and handling

Information concerning the safety of this product is listed in the corresponding Safety Data Sheet, which will be sent with the first delivery or upon updating. Such information is also available from Evonik Operations, Product Safety Department, E-MAIL sds-im@evonik.com We recommend to read carefully the safety data sheet prior to the use of our product.

This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and/or recommendations at any time, without prior or subsequent notice.

Customer Service

**Europe/ Middle-East/
Africa/ Latin America**
Evonik Operations GmbH
Business Line Silica
PB 010-A410
Rodenbacher Chaussee 4
63457 Hanau-Wolfgang
Germany
PHONE +49 6181 59 12532
FAX +49 6181 59 712532
aerosil@evonik.com
www.silica-specialist.com

North America
Evonik Corporation
Business Line Silica
299 Jefferson Road
Parsippany, NJ 07054-0677
USA
PHONE +1 800-233-8052
FAX +1 973-929-8502
aerosil@evonik.com
www.silica-specialist.com

Asia (excluding Japan)
Evonik (SEA) Pte. Ltd.
Business Line Silica
3 International Business Park
Nordic European Centre, #07-18
Singapore 609927
PHONE +65 6809-6877
FAX +65 6809-6677
aerosil@evonik.com
www.silica-specialist.com

Japan
NIPPON AEROSIL CO., LTD.
Marketing & Sales Division
P.O. Box 7015
Shinjuku Monolith 13F
3-1, Nishi-Shinjuku 2-chrome
Shinjuku-ku, Tokyo
163-0913 Japan
PHONE +81 3 3342-1789
FAX +81 3 3342-1761
infonac@evonik.com
www.aerosil.jp

Technical Service

**Europe/ Middle-East/
Africa/ Latin America**
Evonik Operations
Business Line Silica
HPC 911-221 A
Rodenbacher Chaussee 4
63457 Hanau-Wolfgang
Germany
PHONE +49 6181 59-3936
FAX +49 6181 59 4489
technical.service.aerosil@evonik.com
www.silica-specialist.com

North America
Evonik Corporation
Business Line Silica
2 Turner Place
Piscataway, NJ 08855-0365
USA
PHONE +1 888 SILICAS
PHONE +1 732 981-5000
FAX +1 732 981-5275
technical.service.aerosil@evonik.com
www.silica-specialist.com

Asia (excluding Japan)
**Evonik Specialty
Chemicals (Shanghai) Co.,Ltd**
Business Line Silica
55 Chundong Road
Xinzhuang Industry Park
Shanghai 201108
P.R. China
PHONE +86 21 6119-1151
FAX +86 21 6119-1075
technical.service.aerosil@evonik.com
www.silica-specialist.com

Japan
NIPPON AEROSIL CO., LTD.
Applied Technology Group
3 Mita-Cho
Yokkaichi, Mie
510-0841 Japan
PHONE +81 59 345-5270
FAX +81 59 346-4657
infonac@evonik.com
www.aerosil.jp