

# Material Safety Data Sheet

acc. to 91/155/EEC

Printing date 03/30/2001

Reviewed on 03/29/2001

## \* 1 Chemical Product and Company Identification

· Product Name: Hydrated Aluminas

839

(Ground and unground)

· Other Designations:

Aluminum Trihydroxide ATH Series, Bayer Hydrated Alumina, Bayerite, BayGraNite(TM), Bayer Scale Fines, C-230, C-231, C-30, C-33/31, C-31C, C-37G, C-333/331, C-40, C-430, C-431, C-530, C-531, C-DPS-1, C-NEV-1, Coated ATH, CHSO-1, CV-3002, CV-3003, CV-3004, Flame Gard(R) Series, HC-1, HS-1, Hydral(R) Series, Hydral(R) 705, Hydral(R) 707, Hydral(R) 710, Hydral(R) 716, Hydral(R) 719, HyBrite(TM) 100, Hydral(R) Coat 2, Hydral(R) Coat 5, Hydral(R) Coat 7, Hydral(R) PGA, Hydral(R) PGA SD, Hydrate 17LVB, Hydrogard CP, Hydrogard GP, Hydrogard CSP, MH-1, MH-2, MHC, Onyx Classica Series, P-3, P-5, P-7, SpaceRite(TM) Series, SRP-A-11, SRP-A-12, SRP-A-13, SRP-A-14, SRP-A-17, SRP-A-18, SRP-A-89E and UFH16.

(R) Registered Trademark of Aluminum Company of America

(TM) Trademark of Aluminum Company of America

· Manufacturer/Supplier:

Alcoa World Alumina LLC  
PO Box 300, Bauxite, AR 72011  
Tel: +1-501-776-4654 or +1-800-860-3290

Health &amp; Safety: +1-412-553-4649

Alcoa World Alumina LLC  
109 Highway 131  
Vidalia, LA 71373  
Tel: +1-318-336-9601 or +1-800-533-4511

Alcoa World Alumina LLC  
Point Comfort Operations  
State Highway 35, Point Comfort  
Calhoun County, TX 77978-0101  
Tel: +1-512-987-2631

Dalton Alumina & Chemicals Co., Inc.  
PO Box 1601  
Dalton, GA 30722  
+1-706-278-4434

Malakoff Industries, Inc.  
PO Box 487  
Highway 31, West  
Malakoff, Texas 75148  
Tel. 1-903-489-1910

Alcoa of Australia Limited, ACN 004 879 298  
PO Box 161, Kwinana  
Western Australia 6167 Australia  
Tel. +61-9-410-3111

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Alcoa Moerdijk B.V.  
Vlasweg 19  
4782 PW Moerdijk  
The Netherlands  
+31-168-324865

Alcoa Aluminio S.A.  
Rodovia Pocos/Andradas Km 10  
37701-970, Pocos de Caldas  
MG, Brazil  
+55-35-729-5000

Alumina Espanola S.A.  
27890 San Ciprián  
Lugo, Spain  
+34-982-55-55-00

· **Emergency Information:** USA: Chemtrec: +1-703-527-3887 +1-800-424-9300 ALCOA: +1-412-553-4001

## \* 2 Composition/Data on components:

CAS No:	Component	
21645-51-2	Aluminum trihydroxide	99.5%

## \* 3 Hazards identification

- **EMERGENCY OVERVIEW:**
- **EYES:** Can cause mild irritation.
- **SKIN:** Can cause mild irritation.
- **INHALATION:** Can cause mild upper respiratory tract irritation.
- **Chemical ingredient and possible processing hazards:**  
Aluminum trihydroxide: Low health risk by inhalation.
- **Hazard description:**
- **Medical conditions aggravated by exposure to the product:**  
Asthma, chronic lung disease, and skin rashes.
- **Information pertaining to particular dangers for man and environment** See item 11.
- **Classification system**  
The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

## \* 4 First aid measures

- **After inhalation**  
Remove to fresh air.  
Check for clear airway, breathing, and presence of pulse.  
Provide cardiopulmonary resuscitation for persons without pulse or respirations.  
Consult a physician.
- **After skin contact**  
Wash with soap and water for at least 15 minutes.  
Consult a physician if irritation persists.
- **After eye contact**  
Flush eyes with plenty of water for at least 15 minutes.  
Consult a physician.
- **After swallowing**  
Do not induce vomiting.

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Never give anything by mouth to a convulsing or unconscious person.  
If swallowed, dilute by drinking large amounts of water.  
Consult a physician.

## \* 5 Fire fighting measures

- Suitable extinguishing agents Use fire fighting measures that suit the environment.
- Protective equipment:  
Fire fighters should wear NIOSH approved, positive pressure, self- contained breathing apparatus and full protective clothing when appropriate.

## \* 6 Accidental release measures

- Person-related safety precautions:



Wear protective clothing.

- Measures for environmental protection: No special measures required.
- Measures for cleaning/collecting: Clean up using dry procedures; avoid dusting.

## \* 7 Handling and storage

- Handling
- Information for safe handling:  
Avoid generating dust.  
Provide adequate ventilation if dust is formed.
- Information about protection against explosions and fires: No special measures required.
- Storage
- Requirements to be met by storerooms and receptacles: Keep material dry.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.

## \* 8 Exposure controls and personal protection

- Additional information about design of technical systems: No further data; see item 7.
- Components with limit values that require monitoring at the workplace:  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Personal protective equipment
- General protective and hygienic measures  
Avoid contact with the eyes.  
Do not inhale dust.
- Breathing equipment:  
Use suitable respiratory protection in case of insufficient ventilation.  
Suitable respiratory protective device recommended:  
Filter NIOSH N95.
- Protection of hands: Wear appropriate gloves to avoid any skin injury.

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- Eye protection: Safety glasses with full side shields or goggles recommended.

## \* 9 Physical and chemical properties:

• Form:	Crystalline powder
• Color:	White
	Off-white
• Odor:	Odorless
• Change in condition	
Melting point/Melting range:	2050°C (3722°F)
Boiling point/Boiling range:	Undetermined
• Flash point:	Not applicable
• Auto igniting:	Product is not self igniting.
• Danger of explosion:	Product does not present an explosion hazard.
• Density at 20°C (68°F):	2.42 g/cm <sup>3</sup>
• Solubility in / Miscibility with Water:	Insoluble
• pH-value at 20°C (68°F):	10.0 (20% in H <sub>2</sub> O)
• Solvent content:	
Organic solvents:	0.0 %
• Solids content:	99.0 %

## \* 10 Stability and reactivity

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Reactions:  
When exposed to fire or heat, aluminum trihydroxide decomposes forming aluminum oxide and water vapor beginning at 300°C (572°F).
- Dangerous products of decomposition:  
Coated ATH:  
Carbon monoxide and carbon dioxide  
Formaldehyde
- Additional information: Non-corrosive.

## \* 11 Toxicological information

- Acute toxicity:
- Primary irritant effect:
- On the skin: Can cause mild irritation.
- On the eye: Can cause mild irritation.
- Inhalation: Can cause mild upper respiratory tract irritation.

## \* 12 Ecological information:

- General notes: Not known to be hazardous to water.

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## \*13 Disposal considerations

- **Product:**
- **Recommendation**  
Collect in containers, bags, or covered dumpster boxes. If reuse or recycling is not possible, material may be disposed of at an industrial landfill.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

## \*14 Transport information

<ul style="list-style-type: none"> <li>· <b>DOT regulations:</b></li> <li>· <b>Hazard class:</b> -</li> <li>· <b>Remarks:</b> U.S.A. DOT: Not regulated - Enter the proper freight classification. "MSDS Number," and "Product Name" on the shipping paperwork.  Canadian TDG Hazard Class &amp; PIN: Not regulated.</li> </ul>
<ul style="list-style-type: none"> <li>· <b>Land transport ADR/RID (cross-border)</b></li> <li>· <b>ADR/RID class:</b> -</li> <li>· <b>Remarks:</b> Not regulated</li> </ul>
<ul style="list-style-type: none"> <li>· <b>Maritime transport IMDG:</b></li> <li>· <b>IMDG Class:</b> -</li> <li>· <b>Marine pollutant:</b> No</li> <li>· <b>Remarks:</b> Not regulated</li> </ul>
<ul style="list-style-type: none"> <li>· <b>Air transport ICAO-TI and IATA-DGR:</b></li> <li>· <b>ICAO/IATA Class:</b> -</li> <li>· <b>Remarks:</b> Not regulated</li> </ul>

## \*15 Regulations

- **U.S. Federal Regulations:**
- **TSCA STATUS:** All components of this product are listed on the TSCA inventory.
- **CERCLA REPORTABLE QUANTITY:** None.
- **SARA TITLE III:**  
Section 302 Extremely Hazardous Substances:  
None.
- **Section 313 Toxic Categories:** None.
- **OTHER INFORMATION:**  
In reference to Title VI of the Clean Air Act of 1990, this material does not contain nor was it manufactured using ozone-depleting chemicals.
- **International Regulations:**
- **AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES:**  
All components of this product are listed on the AICS.
- **Japan - Existing and New Chemical Substances (ENCS)**  
All components of this product are listed on ENCS.

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**\*16 Other information:**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:**

Hazardous Materials Control Committee  
Alcoa Inc., 201 Isabella Street, Pittsburgh, PA 15212-5858 USA  
29.03.01 Supersedes 21.01.00

- **Alcoa MS No: 134231**

- **Appendix:**

- Guide to Occupational Exposure Values 2000, Compiled by the American Conference of Governmental Industrial Hygienists (ACGIH).
- Documentation of the Threshold Limit Values and Biological Exposure Indices, Sixth Edition, 1991, Compiled by the American Conference of Governmental Industrial Hygienists, Inc. (ACGIH).
- NIOSH Pocket Guide to Chemical Hazards, U.S. Department of Health and Human Services, June 1994.
- Dangerous Properties of Industrial Materials, Sax, N. Irving, Van Nostrand Reinhold Co., Inc., 1984.
- Patty's Industrial Hygiene and Toxicology: Volume II: Toxicology, 4th ed., 1994, Patty, F. A.; edited by Clayton, G. D. and Clayton, F. E.: New York: John Wiley & Sons, Inc.
- TOMES CPS(TM), MICROMEDEX, Inc., 2000

- **LEGEND:**

ACGIH American Conference of Governmental Industrial Hygienists  
AICS Australian Inventory of Chemical Substances  
CAS Chemical Abstract Services  
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act  
CFR Code of Federal Regulations  
CPR Cardio-pulmonary Resuscitation  
DOT Department of Transportation  
DSL Domestic Substances List (Canada)  
EINECS European Inventory of Existing Commercial Chemical Substances  
ENCS Japan - Existing and New Chemical Substances  
EWC European Waste Catalogue  
EPA Environmental Protective Agency  
IARC International Agency for Research on Cancer  
LC Lethal Concentration  
LD Lethal Dose  
MAK Maximum Workplace Concentration (Germany) "maximale Arbeitsplatz-Konzentration"  
NDSL Non-Domestic Substances List (Canada)  
NIOSH National Institute for Occupational Safety and Health  
NTP National Toxicology Program  
OEL Occupational Exposure Limit  
OSHA Occupational Safety and Health Administration  
PIN Product Identification Number  
RCRA Resource Conservation and Recovery Act  
SARA Superfund Amendments and Reauthorization Act  
STEL Short Term Exposure Limit

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TCLP Toxic Chemicals Leachate Program  
TDG Transportation of Dangerous Goods  
TLV Threshold Limit Value  
TSCA Toxic Substances Control Act  
TWA Time Weighted Average

m meter, cm centimeter, mm millimeter, in inch,  
g gram, kg kilogram, lb pound, µg microgram,  
ppm parts per million, ft feet

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