

Material Safety Data Sheet
acc. to 91/155/EEC

Printing date 01/21/2000

Reviewed on 01/21/2000

1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**• Product Name: Hydrated Aluminas/Aluminum Trihydroxide** **839****• Other Designations:**

Aluminium Trihydroxid 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-330, 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, Hydral(R) Brite 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 HI, HyGraNite(TM) Series, KB-30, KB-308, KC-30, KH-30, LD-100, Lubral CSP, 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:

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Product Name: Hydrated Aluminas/Aluminum Trihydroxide**839**

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• 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 (non fibrous)	99.5 %
	EINECS: 244-492-7	

• Additional information:Loss on ignition 34-35 %*** 3 Hazards identification****• EMERGENCY OVERVIEW:**

Can cause mild irritation to eyes, skin, and upper respiratory tract.

• 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.

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:

Wear self-contained respiratory protective device.

Wear fully protective suit.

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Product Name: Hydrated Aluminas/Aluminum Trihydroxide**839*** **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:**
Ensure good ventilation/exhaust at the workplace.
Prevent formation of dust.
Provide suction extractors 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 protective device in case of insufficient ventilation.
Short term filter device:
Filter NIOSH N95.
- **Protection of hands:** Impervious gloves.
- **Eye protection:** Safety glasses.

* **9 Physical and chemical properties:**

- **Form:** Crystalline powder
- **Color:**
White
Whitish

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Product Name: Hydrated Aluminas/Aluminum Trihydroxide**839**

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• **Odor:** Odorless

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• **Change in condition**• **Melting point/Melting range:**
3700 ° F• **Boiling point/Boiling range:**• **Flash point:**• **Auto igniting:**• **Danger of explosion:**

Product does not present an explosion hazard.

• **Density:** at 20 ° C
0.087 lb/in³• **Bulk density:** at 20 ° C
8-80 lb/ft³• **Solubility in / Miscibility with**• **Water:**• **pH-value:** at 20 ° C• **Solvent content:**• **Organic solvents:**• **Water:**• **Solids content:**

	<u>Value/Range</u>	<u>Unit</u>	<u>Method</u>
Melting point/Melting range:	2040	° C	
Boiling point/Boiling range:	Undetermined		
Flash point:	Not applicable		
Auto igniting:	Product is not self igniting.		
Density:	2.4	g/cm ³	
Bulk density:	0.15-1.3	g/cm ³	
Solubility in / Miscibility with Water:	Insoluble		
pH-value:	8.5-10.2		20% in H ₂ O
Organic solvents:	0.0	%	
Water:	0.0-1.0	%	
Solids content:	99.0	%	

* **10 Stability and reactivity**• **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

• **Dangerous reactions:**

When exposed to fire or heat, aluminum trihydroxide decomposes forming aluminum oxide and water vapor beginning at 200°C (390°F).

• **Dangerous products of decomposition:**

No dangerous decomposition products known.

Coated ATH: Formaldehyde, Carbon monoxide and carbon dioxide.

• **Additional information:** Non-corrosive.* **11 Toxicological information**• **Primary irritant effect:**• **On the skin:** Can cause mild irritation.• **On the eye:** Can cause mild irritation, especially when wet.• **Inhalation:** Can cause mild upper respiratory tract irritation.• **Ingestion:** Can cause mild irritation.• **Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

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Product Name: Hydrated Aluminas/Aluminum Trihydroxide**839*** **12 Ecological information:**

- **General notes:** Generally not hazardous for water.

* **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.
- **European Community Waste disposal key:** 16 03 01
- **Uncleaned packagings:**
- **Recommendation:**
Disposal must be made according to official regulations.

* **14 Transport information**

- **DOT regulations:**
- **Remarks:**
U.S.A. DOT: Not regulated - Enter the proper freight classification. "MSDS Number," and "Product Name" on the shipping paperwork.

Canadian TDG Hazard Class & PIN: Not regulated.
- **Maritime transport IMDG:**
- **Marine pollutant:** No

* **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 311/312 Hazardous Categories:** 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.
- **Markings according to EU guidelines:**
Observe the general safety regulations when handling chemicals. The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (GefStoffV).
- **International Regulations:**
- **CANADIAN DOMESTIC SUBSTANCES LIST:**
All components of this product are listed on the Canadian DSL.
- **AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES:**
All components of this product are listed on the AICS.

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- **Japan - Existing and New Chemical Substances (ENCS)**
All components of this product are listed on ENCS.

* **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
21.01.00 Supersedes 01.09.99

• **Alcoa MS #: 134231**• **Appendix:**

- Guide to Occupational Exposure Values 1999, 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., 1999

• **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
TCLP Toxic Chemicals Leachate Program

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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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