1. Identification

Product identifier

Product Name HYDRATED ALUMINA

Other means of identification

Product Code(s) 839

Synonyms Aluminum Trihydroxide ATH Series; Bayer Hydrated Alumina; BayGranite(R) Series; C-231; C-30; C-31C; C-33; C-333; Coated ATH; FlameGard(R) Series; Hydral(R) Series; Hydral(R) 710; Hydral(R) 717; Hydral(R) Coat 2; Hydral(R) Coat 5; Hydral(R) Coat 7; Hydral(R) Coat 8; Hydral(R) PGA; Hydral(R) PGA SD; Hydrate 17LVB; KB Series; Onyx Classica(R) Series; SpaceRite(R) Series

Recommended use of the chemical and restrictions on use

Recommended use Fire retarding agent; Filler; Water treatment

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Address Almatis, Inc.
P.O. Box 300
4701 Alcoa Road
Bauxite, AR 72022
USA
Telephone: +1 501-776-4677

Emergency telephone number

Emergency Telephone 3E Global Incident Response Hotline (Almatis access code: 334735)
US/Canada: +01 760 476 3962, +1 866 519 4752

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)

No information available

Label elements

None

Hazard statements

Not classified
Precautionary Statements - Prevention
Not applicable

Precautionary Statements - Response
Not applicable

Precautionary Statements - Storage
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal
Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other information
Not applicable

3. Composition/information on ingredients

Substance

Synonyms
Aluminum Trihydroxide ATH Series; Bayer Hydrated Alumina; BayGranite(R) Series; C-231; C-30; C-31C; C-33; C-333; Coated ATH; FlameGard(R) Series; Hydral(R) Series; Hydral(R) 710; Hydral(R) 717; Hydral(R) Coat 2; Hydral(R) Coat 5; Hydral(R) Coat 7; Hydral(R) Coat 8; Hydral(R) PGA; Hydral(R) PGA SD; Hydrate 17LVB; KB Series; Onyx Classica(R) Series; SpaceRite(R) Series.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>Trade secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum hydroxide</td>
<td>21645-51-2</td>
<td>&gt;99</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

Inhalation
Remove to fresh air.

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact
Wash skin with soap and water.

Ingestion
Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms
Contact with dust can cause mechanical irritation or drying of the skin.

Indication of any immediate medical attention and special treatment needed

Note to physicians
Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media No information available.
Specific hazards arising from the chemical Avoid generation of dust.

Explosion data
- Sensitivity to mechanical impact None.
- Sensitivity to static discharge Yes.

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions**

Ensure adequate ventilation. Avoid generation of dust. Avoid contact with eyes. Use personal protective equipment as required. Do not breathe dust.

**Other information**

Refer to protective measures listed in Sections 7 and 8.

#### Methods and material for containment and cleaning up

**Methods for containment**

Prevent further leakage or spillage if safe to do so. Prevent dust cloud.

**Methods for cleaning up**

Sweep up and shovel into suitable containers for disposal. Pick up and transfer to properly labeled containers.

### 7. Handling and storage

#### Precautions for safe handling

**Advice on safe handling**

Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with eyes.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

### 8. Exposure controls/personal protection

#### Control parameters

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum hydroxide</td>
<td>TWA: 1 mg/m³ respirable particulate matter</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>21645-51-2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Appropriate engineering controls**

**Engineering controls**

Apply technical measures to comply with the occupational exposure limits. Showers. Eyewash stations. Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

No special protective equipment required.

**Hand protection**

Wear suitable gloves.

**Skin and body protection**

If there is a risk of contact:. Wear suitable protective clothing.
Respiratory protection
No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations
Do not breathe dust.

9. Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>8.5 - 10.2</td>
<td>aqueous solution</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>-</td>
<td>Liquid at room temperature</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Upper flammability or explosive limits</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability or explosive limits</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
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</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Water solubility</td>
<td>insoluble</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>-</td>
<td>Does not ignite</td>
</tr>
<tr>
<td>Hyphen</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No data available</td>
<td>None known</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Reactivity
No information available.

Chemical stability
Stable under normal conditions.

Possibility of hazardous reactions
Heating causes rise in pressure with risk of bursting. Due to gaseous decomposition products, overpressure can occur in tightly sealed containers.

Conditions to avoid
Excessive heat. Heating in air. dust formation.

Incompatible materials
None known based on information supplied.

Hazardous decomposition products
Steam.
11. Toxicological information

Information on likely routes of exposure

Product Information

**Inhalation**
Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

**Eye contact**
Specific test data for the substance or mixture is not available. Dust contact with the eyes can lead to mechanical irritation.

**Skin contact**
Specific test data for the substance or mixture is not available. May cause irritation.

**Ingestion**
Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms**
No information available.

Numerical measures of toxicity

Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum hydroxide 21645-51-2</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation**
No information available.

**Serious eye damage/eye irritation**
No information available.

**Respiratory or skin sensitization**
No information available.

**Germ cell mutagenicity**
No information available.

**Carcinogenicity**
No information available.

**Reproductive toxicity**
No information available.

**STOT - single exposure**
No information available.

**STOT - repeated exposure**
No information available.

**Aspiration hazard**
No information available.

**Other adverse effects**
No information available.

**Interactive effects**
No information available.

12. Ecological information
Ecotoxicity
Aquatic toxicity is unlikely due to low solubility. Not considered to be harmful to aquatic life.

Persistence and degradability
Not readily biodegradable.

Bioaccumulation
Bioaccumulative potential.

Mobility
No information available.

Other adverse effects
No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products
Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging
Do not reuse empty containers.

14. Transport information

DOT
Not regulated

TDG
Not regulated

ICAO (air)
Not regulated

IATA
Not regulated

IMDG
Not regulated

15. Regulatory information

International Inventories

TSCA
Contact supplier for inventory compliance status.

DSL/NDSL
Contact supplier for inventory compliance status.

EINECS/ELINCS
Contact supplier for inventory compliance status.

ENCS
Contact supplier for inventory compliance status.

IECSC
Contact supplier for inventory compliance status.

KECL
Contact supplier for inventory compliance status.

PICCS
Contact supplier for inventory compliance status.

AICS
Contact supplier for inventory compliance status.

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
TWA        TWA (time-weighted average)  STEL  STEL (Short Term Exposure Limit)
Ceiling    Maximum limit value        *     Skin designation

Key literature references and sources for data used to compile the SDS
Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

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10-Jul-2019

Revision Note
No information available.

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet