SAFETY DATA SHEET

1. Identification

Product identifier **BAUXITE**

Other means of identification

SDS number 354

Version # 05

Revision date March 11, 2015.

Synonym(s) Metallurgical grade bauxite

Recommended use Raw material for alumina production

Recommended restrictions For industrial use only.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Alcoa World Alumina LLC
201 Isabella Street
Pittsburgh, PA 15212-5858 US
Health and Safety E-mail: accmsds@alcoa.com
Health and Safety Tel: 1-412-553-4649
Health and Safety Fax: 1-412-553-4822

Emergency Information: USA: Chemtrec: +1-703-527-3887 +1-800-424-9300
(24 Hour Emergency Telephone, multiple languages spoken);
ALCOA; +1-412-553-4001 (24 Hour Emergency Telephone, only English spoken)

Website: For a current Safety Data Sheet, refer to Alcoa website: www.alcoa.com
or internally at my.alcoa.com EHS Community

Emergency Information CHEMTREC: +1-703-527-3887 +1-800-424-9300 (24 Hour Emergency Telephone, multiple languages spoken); ALCOA: +1-412-553-4001 (24 Hour Emergency Telephone, only English spoken)

Website For a current Safety Data Sheet, refer to Alcoa websites: www.alcoa.com or internally at my.alcoa.com EHS Community

2. Hazard(s) identification

Classification

Contains quartz (crystalline silica). Dust created if the material is ground/milled will contain crystalline silica, some of which may be respirable (i.e., particles small enough to enter the lungs when inhaled). Respirable dust from this product would be classified as a Hazardous Substance.

Physical hazards Not classified.

Health hazards	Carcinogenicity (inhalation)	Category 1A
	Specific target organ toxicity, repeated exposure (inhalation)	Category 2 (lungs)

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement May cause cancer by inhalation. Causes damage to organs (lungs) through prolonged or repeated exposure.

Precautionary statement

Prevention Do not breathe dust. Obtain special instructions before use.

Response IF exposed or concerned: Get medical advice/attention.

Storage Store in accordance with local/regional/national/international regulation.

Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.
Specific hazards	Prolonged exposure may cause chronic effects.

3. Composition/information on ingredients

Composition comments Complete composition is provided below and may include some components classified as non-hazardous.

Mixtures

Components	CAS #	Percent
Bauxite	1318-16-7	100
Gibbsite [Al(OH)3] (Typical Composition)	21645-51-2	40 - 85
Kaolinite (Al2O3.2SiO2.2H2O) (Typical Composition)	1318-74-7	1 - 20
Hematite (Iron oxide) (Typical Composition)	1317-60-8	1 - 20
Goethite [Fe(OH)O] (Typical Composition)	1310-14-1	0 - 20
Boehmite [Al(OH)O] (Typical Composition)	1318-23-6	0 - 15
Siderite (FeCO3) (Typical Composition)	563-71-3	0 - 10
Silica, crystalline quartz (Typical Composition)	14808-60-7	0 - 6
Anatase (Titanium dioxide) (Typical Composition)	1317-70-0	0 - 5
Rutile (TiO2) (Typical Composition)	1317-80-2	0 - 5
Gibbsite [Al(OH)3] (Western Australia Composition)	21645-51-2	45 - 60
Silica, crystalline quartz (Western Australia Composition)	14808-60-7	10 - 30
Goethite [FeO(OH)] (Western Australia Composition)	1310-14-1	5 - 20
Hematite (Iron oxide) (Western Australia Composition)	1317-60-8	5 - 15
Kaolinite (Al2O3.2SiO2.2H2O) (Western Australia Composition)	1318-74-7	<= 3
Muscovite (K2O.3Al2O3.6SiO2.2H2O) (Western Australia Composition)	1318-94-1	≤3
Boehmite [Al(OH)O] (Western Australia Composition)	1318-23-6	<= 2
Anatase (Titanium dioxide) (Western Australia Composition)	1317-70-0	<= 2

Additional Information Typical Composition : This product may contain small amounts of naturally occurring uranium (<0.02%) and thorium (<0.02%). The total amount of radioactivity, including progeny and other naturally occurring isotopes, associated with this product is less than 7.5 Becquerel/gram (Bq/g). Western Australia Composition : This product may contain small amounts of naturally occurring uranium (<0.04%) and thorium (<0.04%). The total amount of radioactivity, including progeny and other naturally occurring isotopes, associated with this product is less than 15.5 Becquerel/gram (Bq/g).

4. First-aid measures

Eye contact	Rinse eyes with plenty of water or saline for at least 15 minutes. Consult a physician.
Skin contact	Wash with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.
Inhalation	Dust from processing: 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.
Ingestion	If swallowed, dilute by drinking water. Recommend quantities up to 30 mL (~1 oz.) in children and 250 mL (~9 oz.) in adults. Do NOT induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions. Consult a physician.
Most important symptoms/effects, acute and delayed	Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media	Use fire fighting methods and materials that are appropriate for surrounding fire.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Not an explosion hazard.
Special protective equipment and precautions for firefighters	Firefighters should wear NIOSH approved, positive pressure, self-contained breathing apparatus and full protective clothing when appropriate.
Fire-fighting equipment/instructions	No specific precautions.
General fire hazards	Non-combustible.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Use personal protection recommended in Section 8 of the SDS.
Evacuation procedures	None necessary.
Methods and materials for containment and cleaning up	Avoid generating dust. Use dry cleanup procedures.
Environmental precautions	No special environmental precautions required.

7. Handling and storage

Handling	Avoid contact with skin and eyes. Avoid generating dust. Keep material dry.
Storage	Containerize in drums, tarped dump truck, or bulk container, so that dusting is minimal during storage and transportation.

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA

Components	Type	Value	Form
Hematite (Iron oxide) (CAS 1317-60-8)	TWA	10 mg/m3	Fume.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Anatase (Titanium dioxide) (CAS 1317-70-0)	PEL	15 mg/m3	Total dust.
Gibbsite [Al(OH)3] (CAS 21645-51-2)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Rutile (TiO2) (CAS 1317-80-2)	PEL	15 mg/m3	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Gibbsite [Al(OH)3] (CAS 21645-51-2)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Silica, crystalline quartz (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

ACGIH

Components	Type	Value	Form
Boehmite [Al(OH)O] (CAS 1318-23-6)	TWA	1 mg/m3	Respirable fraction as Al

ACGIH

Components	Type	Value	Form
Kaolinite (Al2O3.2SiO2.2H2O) (CAS 1318-74-7)	TWA	1 mg/m3	Respirable fraction as Al.

US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3, non-standard units

Components	Type	Value	Form
Anatase (Titanium dioxide) (CAS 1317-70-0)	TWA	10 mg/m3	
Hematite (Iron oxide) (CAS 1317-60-8)	TWA	5 mg/m3	Respirable fraction.
Rutile (TiO2) (CAS 1317-80-2)	TWA	10 mg/m3	
Siderite (FeCO3) (CAS 563-71-3)	TWA	1 mg/m3	
Silica, crystalline quartz (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

Alcoa

Components	Type	Value	Form
Gibbsite [Al(OH)3] (CAS 21645-51-2)	TWA	3 mg/m3	Respirable fraction
		10 mg/m3	Inhalable fraction
Silica, crystalline quartz (CAS 14808-60-7)	TWA	0.3 mg/m3	Total
		0.05 mg/m3	Respirable fraction

General Use personal protective equipment as required.

Appropriate engineering controls Dust from processing: Use with adequate ventilation to meet the limits listed in Section 8.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses with full side shields or goggles recommended. Use tight fitting goggles if excessive levels of dust are generated.

Skin protection

Hand protection Wear appropriate gloves to avoid any skin injury.

Other No special protective equipment required.

Respiratory protection Dust from processing: Use NIOSH-approved respiratory protection as specified by an Industrial Hygienist or other qualified professional if concentrations exceed the limits listed in Section 8. Suitable respiratory protective device recommended: N95.

Thermal hazards Not applicable.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Form Solid, rock to soil-like.

Color Various colors.

Odor Odorless

Odor threshold Not applicable

Density 2.40 - 2.60 g/cm3

Bulk density 0.69 - 1.6 g/cm3

pH Not determined

Melting point/freezing point 3700.4 °F (2038 °C)

Initial boiling point and boiling range Not applicable

Flash point Not applicable

Evaporation rate Not applicable

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - upper (%)	Not applicable
Flammability limit - lower (%)	Not applicable

Explosive properties	Not an explosion hazard.
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	Not determined
Solubility(ies)	Insoluble
Partition coefficient (n-octanol/water)	Not applicable. Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
Viscosity	Not applicable

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal conditions of use, storage, and transportation.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	None known.
Incompatible materials	None known.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Health effects associated with ingredients

Gibbsite: Low health risk by inhalation. Generally considered to be biologically inert.

Hematite: Chronic overexposures: Can cause benign lung disease (siderosis). Ingestion: Can cause irritation of gastrointestinal tract, bleeding, changes in the pH of the body fluids (metabolic acidosis) and liver damage.

Silica, crystalline (quartz, cristobalite, tridymite): Chronic overexposures: Can cause scarring of the lungs (silicosis), suppression of the immune system and lung cancer. IARC/NTP: Listed as "known to be a human carcinogen" (if respirable size) by the NTP. Listed as carcinogenic to humans (by inhalation) by IARC (Group 1). Additional information: Studies with experimental animals (rats) by inhalation have found lung tumors.

Titanium dioxide: Can cause irritation of eyes and respiratory tract. Chronic overexposures: Can cause chronic bronchitis. IARC/NTP: Listed as possibly carcinogenic to humans by IARC (Group 2B).

Health effects associated with compounds formed during processing

No new/additional compounds are expected to be formed during processing.

Information on likely routes of exposure

Eye contact	Can cause mild irritation.
Inhalation	Dust: Can cause mild irritation of the upper respiratory tract. Chronic overexposures (airborne particles of respirable size): Can cause benign lung disease, scarring of the lungs (silicosis) and lung cancer.
Ingestion	Can cause mild irritation.
Skin contact	Can cause mild irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Prolonged exposure may cause chronic effects.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Gibbsite [Al(OH)3] (CAS 21645-51-2)		
Acute		
Oral		
LD50	Rat	> 5000 mg/kg
Other		
LD50	Rat	1100 mg/kg
Hematite (Iron oxide) (CAS 1317-60-8)		
Acute		
Oral		
LD50	Rat	> 10000 mg/kg
Siderite (FeCO3) (CAS 563-71-3)		
Acute		
Oral		
LD50	Mouse	3800 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Non-corrosive. Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Mild eye irritation

Respiratory or skin sensitization Not a skin sensitizer. Based on available data, the classification criteria are not met.

Respiratory sensitization Not a respiratory sensitizer. Based on available data, the classification criteria are not met.

Skin sensitization Not a skin sensitizer.

Germ cell mutagenicity Contains no ingredient listed as a mutagen. Based on available data, the classification criteria are not met.

Carcinogenicity Chronic overexposures (airborne particles of respirable size): Can present a cancer hazard (Silica, crystalline quartz, Titanium dioxide).

ACGIH Carcinogens

Anatase (Titanium dioxide) (CAS 1317-70-0)	A4 Not classifiable as a human carcinogen.
Boehmite [Al(OH)O] (CAS 1318-23-6)	A4 Not classifiable as a human carcinogen.
Gibbsite [Al(OH)3] (CAS 21645-51-2)	A4 Not classifiable as a human carcinogen.
Hematite (Iron oxide) (CAS 1317-60-8)	A4 Not classifiable as a human carcinogen.
Kaolinite (Al2O3.2SiO2.2H2O) (CAS 1318-74-7)	A4 Not classifiable as a human carcinogen.
Rutile (TiO2) (CAS 1317-80-2)	A4 Not classifiable as a human carcinogen.
Silica, crystalline quartz (CAS 14808-60-7)	A2 Suspected human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Anatase (Titanium dioxide) (CAS 1317-70-0)	2B Possibly carcinogenic to humans.
Hematite (Iron oxide) (CAS 1317-60-8)	3 Not classifiable as to carcinogenicity to humans.
Rutile (TiO2) (CAS 1317-80-2)	2B Possibly carcinogenic to humans.
Silica, crystalline quartz (CAS 14808-60-7)	1 Carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

Silica, crystalline quartz (CAS 14808-60-7)	Known To Be Human Carcinogen.

Reproductive toxicity Contains no ingredient listed as toxic to reproduction. Based on available data, the classification criteria are not met.

Routes of exposure Eye contact. Skin contact. Inhalation. Ingestion.

Specific target organ toxicity - single exposure Not classified. Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure Causes damage to organs (lungs) through prolonged or repeated exposure by inhalation.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged or repeated overexposure causes lung damage.

Further information None known.

12. Ecological information

Ecotoxicity This material is not expected to be harmful to aquatic life.

Components		Species	Test Results
Anatase (Titanium dioxide) (CAS 1317-70-0)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus)	> 1000 mg/l, 96 hours
Kaolinite (Al2O3.2SiO2.2H2O) (CAS 1318-74-7)			
Aquatic			
Crustacea	LC50	Water flea (Daphnia pulex)	> 1125 mg/l, 24 hours
			> 1125 mg/l, 48 hours
Rutile (TiO2) (CAS 1317-80-2)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus)	> 1000 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability The product contains inorganic compounds which are not biodegradable.

Bioaccumulative potential The product is not bioaccumulating.

Mobility in soil Not considered mobile.

Mobility in general Not considered mobile.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Reuse or recycle material whenever possible. If reuse or recycling is not possible, disposal must be made according to local or governmental regulations.

Waste codes RCRA Status: Not federally regulated in the U.S. if disposed of "as is."
RCRA waste codes other than described here may apply depending on use of the product. Status must be determined at the point of waste generation. Refer to 40 CFR 261 or state equivalent in the U.S. Source materials (uranium and thorium) are specifically excluded from the Environmental Protection Agency's hazardous waste disposal program (40 CFR 261.4).

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

Contaminated packaging Dispose of in accordance with local regulations.

14. Transport information

General Shipping Information

Basic Shipping Information

ID number -

Proper shipping name Bauxite

Hazard class -

Packing group -

General Shipping Notes

• Standard Transportation Commodity Code: 10-511-10.
• HTS (Harmonized Tariff Schedule) code: 2606.00.0090
• The import/export HTS (Harmonized Tariff Schedule) code given above is the United States HTS code provided by Alcoa's Customs Compliance Office in Knoxville, TN. Other country specific HTS codes may apply. If available, more information on the HTS codes will be provided on country specific Material Safety Data Sheets.
• Bauxite is listed in the International Maritime Solid Bulk Cargoes (IMSBC) Code (2013 Edition) as Group C cargo, which is neither liable to liquefy nor to possess chemical hazards.
• Transport in a dry and covered sift-proof packaging or receptacle. Outside storage during transit permitted on pads (with a base of concrete or other impervious material) that are covered and have secondary containment.
• When "Not regulated", enter the proper freight classification, SDS Number and Product Name onto the shipping paperwork.

DOT Specific Notes

• During a conference call on August 9, 2007 per an interpretation by Richard Raksnis, Commander DHS USCG-Washington DC office, it was announced that even when shipped in volumes that meet an EPA Reportable Quantity (RQ), this material is not regulated by 46 CFR and the associated special permit was withdrawn effective immediately. Subsequent letter of interpretation and letter for rescinding the special permit received from USCG on August 13, 2007. In the event of a RQ release, this material is regulated by the U.S. EPA for reporting due to the presences of NORMs (naturally occurring radioactive materials), specifically Radionuclides.

• If a release occurs at any time while shipment is in U.S., the National Response Center must be notified immediately at one of the following numbers: 1-800-424-8802 or 1-202-426-2675 or 1-202-276-2675; or by Fax To: 1-202-267-2165; or by Telex # 892327. For application of RQ, see the Shipping Chart in the note below.

SHIPPING CHART:

COUNTRY	SOURCE	PORT	RQ (tons)
Africa	Guiena	Kampsar (Boke)	2,053
Africa	Sierra Leone	Freetown	5,081
Australia	Queensland	Weipa	2,205
Australia	Willowdale*	Wagerup	396
Australia	Willowdale	Wagerup	499
S. America	Brazil	Trombetas	2,415
S. America	Guyana	New Amsterdam	1, 440
S. America	Venezuela	Matanzas	794
S.W. Asia	India	Bedi	3,173

*(underflow material that remains at the mining complex)

These materials are NOT subject to release notification once transloaded from vessel or barge to either motor or rail.

Disclaimer

This section provides basic classification information and, where relevant, information with respect to specific modal regulations, environmental hazards and special precautions. Otherwise, it is presumed that the information is not available/not relevant

15. Regulatory information

US federal regulations

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.
Products containing less than 0.05% of naturally occurring uranium and thorium are exempt from Nuclear Regulatory Commission regulations as "unimportant" (10 CFR 40.13).

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 hazard categories

Immediate Hazard - No
Delayed Hazard - Yes — If respirable particulates are generated
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

No

SARA 311/312 Hazardous chemical

Yes

SARA 313 (TRI reporting)

Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Anatase (Titanium dioxide) (CAS 1317-70-0)
Hematite (Iron oxide) (CAS 1317-60-8)
Rutile (TiO2) (CAS 1317-80-2)
Silica, crystalline quartz (CAS 14808-60-7)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Anatase (Titanium dioxide) (CAS 1317-70-0)
Hematite (Iron oxide) (CAS 1317-60-8)
Rutile (TiO2) (CAS 1317-80-2)
Siderite (FeCO3) (CAS 563-71-3)
Silica, crystalline quartz (CAS 14808-60-7)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Anatase (Titanium dioxide) (CAS 1317-70-0)	Listed: September 2, 2011
Rutile (TiO2) (CAS 1317-80-2)	Listed: September 2, 2011
Silica, crystalline quartz (CAS 14808-60-7)	Listed: October 1, 1988

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

SDS Status

March 11, 2015: Change(s) in Section: 1, 2, 11 and 14.
November 9, 2009: New format.
August 29, 2007: Change(s) in Section: 14.
June 22, 2007: Change(s) in Section: 2, 3, 8, 13 and 14.
June 23, 2004: Change(s) in Section: 2, 8 and 15. Replaces Reynolds SDS Number 5210, Metallurgical Grade Bauxite.
October 31, 2000: New format.
Origination date: January 1, 1985

Hazardous Materials Control Committee
Preparer: Jim Perriello, +1-865-977-2051.

SDS System Number: 115872

Revision date March 11, 2015.

Version # 05

Revision Information

Product and Company Identification: Product and Company Identification
Hazards Identification: US Hazardous
Composition / Information on Ingredients: Disclosure Overrides
Physical & Chemical Properties: Multiple Properties
Transport Information: Agency Name, Packaging Type, and Transport Mode Selection
Regulatory Information: United States
HazReg Data: North America
GHS: Qualifiers

Disclaimer The information in the sheet was written based on the best knowledge and experience currently available.

Other information

• Guide to Occupational Exposure Values 2014, Compiled by the American Conference of Governmental Industrial Hygienists (ACGIH).
• NIOSH Pocket Guide to Chemical Hazards, U.S. Department of Health and Human Services, September 2005.
• TOXNET, U.S. National Library of Medicine
• expub, Expert Publishing, LLC., www.expub.com,
• Ariel, 3E Company, www.3Ecompany.com

Key/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)
EC Effective Concentration
ED Effective Dose
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
PMCC Pensky Marten Closed Cup
RCRA Resource Conservation and Recovery Act
SARA Superfund Amendments and Reauthorization Act
SIMDUT Système d'Information sur les Matières Dangereuses Utilisées au Travail
STEL Short Term Exposure Limit
TCLP Toxic Chemicals Leachate Program
TDG Transportation of Dangerous Goods
TLV Threshold Limit Value
TSCA Toxic Substances Control Act
TWA Time Weighted Average
WHMIS Workplace Hazardous Materials Information System
m meter, cm centimeter, mm millimeter, in inch,
g gram, kg kilogram, lb pound, µg microgram,
ppm parts per million, ft feet

*** End of SDS ***

BAUXITE

Danger

Hazard statement

Causes damage to organs (lungs) through prolonged or repeated exposure. May cause cancer by inhalation.

Precautionary statement

Prevention

Obtain special instructions before use. Do not breathe dust.

Response

If exposed or concerned: Get medical advice/attention.

Storage

Store in accordance with local/regional/national/international regulations.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Products containing less than 0.05% of naturally occurring uranium and thorium are exempt from Nuclear Regulatory Commission regulations as "unimportant" (10 CFR 40.13).

Supplemental information

Non-combustible.

FIRE FIGHTING MEASURES: Use fire fighting methods and materials that are appropriate for surrounding fire.

IN CASE OF SPILL: Avoid dust formation. Keep material dry.

See Alcoa SDS Number 0354.

USA: Chemtrec: +1-703-527-3887 +1-800-424-9300 (24 Hour Emergency Telephone, multiple languages spoken)

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Alcoa Health and Safety Email: accmsds@alcoa.com Tel: +1-412-553-4649 and Fax: +1-412-553-4822

ALCOA