

# Safety Data Sheet

Revision Date: 05/03/16      Supersedes: 05/19/15

Desiccant: **ACTIVATED ALUMINA**  
**AA-4 (1/8"), AA-6 (1/16"),**  
**AA-25 (1/4"), AA-60 (3/16")**

**PRODUCT NAME:** Activated Alumina

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## 1. IDENTIFICATION

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**Product identifier:** Activated Alumina

**Trade Name:** AA-4 / AA-6 / AA-25 / AA-60

**Application of the substance / the mixture**

Absorbent  
Anti-moisture agent  
Intermediate  
Preparation of catalysts  
Drier/ Catalyst  
Water treatment

**Details of the supplier of the safety data sheet**

SPX Flow Industrial  
4647 S.W. 40<sup>th</sup> Avenue  
Ocala, Florida 34474-5799 USA  
1-352-237-1220

**Information department:** Health, Safety, & Environmental Department

**Emergency telephone number:** 1-352-237-1220 (Monday – Friday, 8:00 a.m. – 5:00 p.m. EST)

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## 2. HAZARDS IDENTIFICATION

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**Classification of the substance or mixture**

The product is not classified according to the Globally Harmonized System (GHS)

**Label elements:**

**GHS label elements:** Not applicable.

**Hazard pictograms:** Not applicable.

**Signal word:** Not applicable

**Hazard statements:** Not applicable.

**GHS Classification System:**

Health Rating: 5 – Minimal Hazard  
Flammability Rating: 5 – Minimal Hazard  
Reactivity Rating: 5 – Minimal Hazard  
Contact Rating: 5 – Minimal Hazard

**Other hazards:**

**Results of PBT and vPvB Assessment:**

**PBT:** Not applicable.

**vPvB:** Not applicable.

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## 3. COMPOSITION / INFORMATION ON INGREDIENTS

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**Chemical characterization:** Mixtures

**Dangerous Components:**

1344-28-1	Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )	94-100%
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**Non-Dangerous Components:**

7732-18-5	Water, distilled, conductivity or of similar purity	≤ 6%
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## 4. FIRST AID MEASURES

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**Description of first aid measures:**

**General Information:** No special measures required.

**After Inhalation:** Supply fresh air. Call a physician in case of complaints.

**After Skin Contact:** Generally the product does not irritate the skin.

**After Eye Contact:** Rinse opened eye for several minutes under running water.

**After Swallowing:** If symptoms persist consult doctor.

**Information to Physician:**

**Most important symptoms and effects, both acute and delayed:** No further relevant information available.

**Indication of any immediate medical attention and special treatment needed:** No further relevant information available.

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## 5. FIRE FIGHTING MEASURES

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**Extinguishing Media**

**Suitable extinguishing agents:**

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Special hazards arising from the substance or mixture:** No further relevant information available.

**Advice for Firefighters**

**Required Protective Equipment:** No special measures required.

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## 6. ACCIDENTAL RELEASE MEASURES

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**Personal precautions, protective equipment and emergency procedures:** Not required.

**Environmental precautions:** No special measures required.

**Methods and material for containment and cleaning up:** Pick up mechanically.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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## 7. HANDLING AND STORAGE

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**Handling:**

**Precautions for safe handling:** No special measures required.

**Information for Protection against Explosions and Fires:** No special measures required.

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

**Storage:**

**Requirements to be met by storerooms and receptacles:** No special requirements.

**Information about storage in one common storage facility:** Not required.

**Further Information about Storage Conditions:** None

**Specific End Use(s):** No further relevant information available.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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**Additional Information for Design of Technical Systems:** No further data; see Section 7.

**Control Parameters**

**Components with Limit Values that Require Monitoring at the Workplace:**

**1344-28-1 aluminum oxide (non-fibrous)**

PEL Long-term Value:    15 mg/m<sup>3</sup> (Total Dust)  
   5 mg/m<sup>3</sup> (Respirable Fraction)

REL Long-term Value:    10 mg/m<sup>3</sup> (Total Dust)  
   5 mg/m<sup>3</sup> (Respirable Fraction)

TLV Long-term Value:    1 mg/m<sup>3</sup> as Al (Respirable Fraction)

**Additional information:** The lists that were valid during the creation were used as basis.

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## Exposure Controls

### Personal Protective Equipment:

### General Protective and Hygienic Measures:

The usual precautionary methods for handling chemicals should be followed.

### Breathing Equipment:

Suitable respiratory protective device recommended. Not required.

**Hand protection:** Wear protective gloves.

### Material of Gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

### Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** Not required.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Information on basic physical and chemical properties

#### General Information

##### Appearance:

Form:	Solid
Color:	White
Odor:	Odorless
Odor Threshold:	Not Determined
pH-value:	Not Applicable

##### Change in condition

Boiling Point/Boiling Range:	Not Determined
Melting Point/Melting Range:	2050°C (3722°F)

Flash Point: Not Applicable.

Flammability (Solid or Gaseous): Not Determined

##### Ignition Temperature:

Decomposition Temperature: Not Determined.

Auto igniting: Product is not self-igniting.

Danger of Explosion: Product does not present an explosion hazard.

##### Explosion Limits:

Lower:	Not Determined.
Upper:	Not Determined.

Vapor Pressure: Not Applicable.

Density at 20°C (68°F): 0.6 g/cm<sup>3</sup> (5.007 lbs./gal)

Bulk Density at 20°C (68°F): 700 kg/m<sup>3</sup>

Relative Density: Not Determined.

Vapor Density (air = 1): Not Applicable

Evaporation Rate: Not Applicable

Solubility in / Miscibility with Water: Insoluble.

Partition Coefficient (N-octanol/water): Not Determined.

##### Viscosity:

Dynamic: Not Applicable.

Kinematic: Not Applicable.

##### Solvent Content:

Organic Solvents: 0.0%

Water: 6.0%

Solids Content: 100%

Other Information: No further relevant information available.

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## 10. STABILITY AND REACTIVITY

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### Reactivity

#### Chemical stability

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Possibility of hazardous reactions:** No dangerous reactions known.

**Conditions to Avoid:** No further information available.

**Incompatible Materials:** No further information available.

**Hazardous decomposition products:** No dangerous decomposition products known.

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## 11. TOXICOLOGICAL INFORMATION

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### Information on toxicological effects

#### Acute Toxicity:

#### Primary Irritant Effect:

**Skin contact:** No irritant effect.

**Eye contact:** No irritating effect.

**Sensitization:** No sensitizing effects known.

#### Additional Toxicological Information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications the product does not have any harmful effects according to our experience and the information provided to us.

#### Carcinogenic categories

**IARC (International Agency for Research on Cancer):** None of the ingredients is listed.

**NTP (National Toxicology Program):** None of the ingredients is listed.

**OSHA-Ca (Occupational Safety & Health Administration):** None of the ingredients is listed.

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## 12. ECOLOGICAL INFORMATION

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### Toxicity:

**Aquatic Toxicity:** No further relevant information available.

**Persistence and Degradability:** No further relevant information available.

#### Behavior in Environmental Systems:

**Bio-accumulative Potential:** No further relevant information available.

**Mobility in Soil:** No further relevant information available.

#### Additional Ecological Information:

**General Notes:** Generally not hazardous for water.

#### Results of PBT and vPvB assessment

**PBT:** Not applicable

**vPvB:** Not applicable

**Other Adverse Effects:** No further relevant information available.

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## 13. DISPOSAL CONSIDERATION

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### Waste Treatment Methods:

**Recommendation:** Smaller quantities can be disposed of with household waste.

### Uncleaned packaging:

**Recommendation:** Disposal must be made according to official regulations.

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## 14. TRANSPORT INFORMATION

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**UN-Number:**  
DOT, ADR, ADN, IMDG, IATA:                      Not applicable.

**UN proper shipping number:**  
DOT, ADR, ADN, IMDG, IATA:                      Not applicable.

**Transport hazard class(es):**  
DOT, ADR, ADN, IMDG, IATA Class:              Not applicable.

**Packing Group:**  
DOT, ADR, IMDG, IATA:                              Not applicable.

**Environmental hazards:**  
**Marine pollutant:**                                      No.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:**              Not applicable.

**UN "Model Regulation":**                              -

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## 15. REGULATORY INFORMATION

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**Safety, health and environmental regulations/legislation specific for the substance or mixture:**

**SARA:**

**Section 355 (Extremely Hazardous Substances):** None of the ingredients is listed.

**Section 313 (Specific Toxic Chemical Listings):** 1344-28-1, Aluminum Oxide (non-fibrous).

**TSCA (Toxic Substances Control Act):** All ingredients are listed.

**Proposition 65:**

**Chemicals Known to Cause Cancer:** None of the ingredients is listed.

**Chemicals Known to Cause Reproductive Toxicity for Females:** None of the ingredients is listed.

**Chemicals Known to Cause Reproductive Toxicity for Males:** None of the ingredients is listed.

**Chemicals Known to Cause Developmental Toxicity:** None of the ingredients is listed.

**Carcinogenic Categories:**

**EPA (Environmental Protection Agency):** None of the ingredients is listed.

**TLV (Threshold Limit Value established ACGIH):** 1344-28-1 aluminum oxide: A4

**NIOSH-Ca (National Institute for Occupational Safety and Health):** None of the ingredients is listed.

**GHS label elements:**                      Not applicable.

**Hazard pictograms:**                      Not applicable.

**Signal word:**                                      Not applicable

**Hazard statements:**                      Not applicable.

**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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## 16. OTHER INFORMATION

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**Preparation Date:** May 3, 2016

**Revision Number:** 1

**SDS Status:** Changes in sections 1, 2, and 9.

**Supersedes:** 05/19/15.

**Other Classifications:**

**HMS (U.S.A.)**

Health Hazard:                      1  
Fire Hazard:                              0  
Reactivity:                                0  
Personal Protection:                  E

**National Fire Protection Association (U.S.A.)**

Health:                                      0  
Flammability:                            0  
Reactivity:                                0

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.

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## Safety Data Sheet

**ATTENTION: Plant Manager/Safety Director:**

This SDS supersedes all prior data sheets received for this product. We urge you to study it carefully. This is provided with each container as our way of communicating Health, Safety, and Environmental Protection Information to our customers.

This information is provided to ensure safe handling and storage of our products in accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200. The information contained in this SDS must be passed on to all employees in your firm that handle and/or become involved in the implementation or control of operations involving use of the product. We strongly urge you to forward this SDS to all parties that have a need to know the information contained herein!

### LEGEND:

ACGIH	American Conference of Government Industrial Hygienists	m	meter
AICS	Australian Inventory of Chemical Substances	cm	centimeter
CAS	Chemical Abstract Services	mm	millimeter
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	in	inch
CFR	Code of Federal Regulations		
CPR	Cardio-Pulmonary Resuscitation	g, gm	gram
DOT	Department of Transportation	kg	kilogram
DSL	Domestic Substances List (Canada)	lb	pound
EINECS	European Inventory of Existing Commercial Chemical Substances	µg	microgram
ENCS	Japan - Existing and New Chemical Substances		
EWA	European Waste Catalog	ppm	parts per million
EPA	Environmental Protection Agency	ft	feet
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 of Occupational Safety and Health		
NTP	National Toxicology Program		
OEL	Occupational Exposure Limit		
OSHA	Occupational Safety and Health Administration		
PEL	Permissible Exposure Limit		
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		
TDG	Transportation of Dangerous Goods		
TLV	Threshold Limit Value		
TSCA	Toxic Substances Control Act		
TWA	Time Weighted Average		

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