



# Bayville Chemical Supply Company Inc.

70-G East Jefryn Boulevard, Deer Park, New York 11729 USA  
Telephone: 631-586-4309 E-Mail: [info@BayvilleChemical.net](mailto:info@BayvilleChemical.net) Fax: 631-254-5591

## SAFETY DATA SHEET

### SECTION I - PRODUCT IDENTIFICATION Aluminum oxide, powder, pieces and sputter targets

#### **MANUFACTURER NAME AND ADDRESS:**

Bayville Chemical Supply Company Inc.

70-G East Jefryn Boulevard

Deer Park, NY 11729 USA

CHEMTEL

Local Poison  
/Emergency

#### **TELEPHONE NUMBERS:**

(800) 255-3928  
or (813) 248-0585

911

**UPC/EAN:** 215-691-6

**SYNONYMS:** Aluminum oxide; alumina; A 1 (sorbent); A1-0109P; abrarex; activated aluminum oxide; alcoa F 1; almite; alon; aluminum sesquioxide; alumite; alundum; brockmann, aluminum oxide; cab-o-grip; compalox; dialuminum trioxide; dispal; dotment 324; faserton; G 2 (oxide); KHP 2; lucalox; microgrit WCA; PS 1; RC 172DBM.

**CHEMICAL FAMILY:** Metal oxide

**DOT HAZARD LABEL:** Not regulated by DOT

**FORMULA:** Al<sub>2</sub>O<sub>3</sub>

**MOLECULAR WEIGHT:** 101.96

### SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION Aluminum oxide, powder, pieces and sputter targets

#### **HAZARDOUS COMPONENTS (CHEMICAL NAME)**

<b><u>NAME:</u></b>	Aluminum oxide	<b><u>PERCENTAGE:</u></b>	0.0 -100.0 %
<b><u>CAS #:</u></b>	1344-28-1		
<b><u>RTECS #:</u></b>	BD1200000		
<b><u>OSHA PEL:</u></b>	15 mg/m <sup>3</sup>	<b><u>ACGIH TLV:</u></b>	10 mg/m <sup>3</sup>
<b><u>OTHER LIMITS:</u></b>	Resp:5 mg/m <sup>3</sup>		
<b><u>SEC.302 (EHS):</u></b>	No	<b><u>SEC.304 RQ:</u></b>	No
<b><u>SEC.313:</u></b>	Yes		

<b><u>NAME:</u></b>	(See SECTION 16-Other Information)		
<b><u>CAS #:</u></b>	<b><u>1344-28-1</u></b>	<b><u>PERCENTAGE:</u></b>	0.0 -100.0 %
<b><u>RTECS #:</u></b>	NA		
<b><u>OSHA PEL:</u></b>	No data.	<b><u>ACGIH TLV:</u></b>	No data.

<b>OTHER LIMITS:</b>	No data.		
<b>SEC.302 (EHS):</b>	No	<b>SEC.304 RQ:</b>	No
<b>SEC.313:</b>	No		

---

### SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

#### Aluminum oxide, powder, pieces and sputter targets

<b>PHYSICAL STATES:</b>	[ ] Gas , [ ] Liquid , [ X ] Solid
<b>BOILING POINT:</b>	2977.00 C (5390.6 F)
<b>MELTING POINT:</b>	2050.00 C (3722.0 F)
<b>SPECIFIC GRAVITY (WATER = 1):</b>	4 at 20.0 C (68.0 F)
<b>DENSITY:</b>	No data.
<b>VAPOR PRESSURE (VS. AIR OR MM HG):</b>	1 mm at 2158.0 C (3916.4 F)
<b>VAPOR DENSITY (VS. AIR = 1):</b>	No data.
<b>EVAPORATION RATE (VS BUTYL ACETATE=1):</b>	No data.
<b>SOLUBILITY IN WATER:</b>	insoluble
<b>OTHER SOLUBILITY NOTES:</b>	Soluble in hot NaOH
<b>PERCENT VOLATILE:</b>	N.A.
<b>PH:</b>	No data.
<b>APPEARANCE AND ODOR:</b>	White powder, no odor.

---

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

#### Aluminum oxide, powder, pieces and sputter targets

**FLASH PT:** N.A. **METHOD USED:** No data.  
**EXPLOSIVE LIMITS:** LEL: NA UEL: NA  
**EXTINGUISHING MEDIA**  
Non-combustible

USE: Not applicable. Use suitable extinguishing media for surrounding materials and type of fire.

#### **SPECIAL FIRE FIGHTING PROCEDURES**

Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

#### **UNUSUAL FIRE AND EXPLOSION HAZARDS**

Aluminum oxide may have an exothermic reaction, above 200C, with halocarbon vapors and may produce toxic hydrochloric acid and phosgene.

---

### SECTION V - REACTIVITY DATA

#### Aluminum oxide, powder, pieces and sputter targets

**STABILITY:** Unstable [ ] Stable [ X ]  
**CONDITIONS TO AVOID - INSTABILITY**

None

#### **INCOMPATIBILITY - MATERIALS TO AVOID**

Chlorine trifluoride, ethylene oxide, halocarbons, oxygen difluoride, sodium nitrate and vinyl acetate.

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS**

Aluminum, hydrochloric acid and phosgene

**HAZARDOUS POLYMERIZATION:** Will occur [ ] Will not occur [ X ]

**CONDITIONS TO AVOID - HAZARDOUS POLYMERIZATION**

None

---

**SECTION VI - HEALTH HAZARD DATA**  
**Aluminum oxide, powder, pieces and sputter targets**

**ROUTE(S) OF ENTRY:** Inhalation? Yes , Skin? No , Eyes? No , Ingestion? No , Other: N

**HEALTH HAZARDS (ACUTE AND CHRONIC)**

Aluminum compounds have many commercial uses and are commonly found in industry. Many of these materials are active chemically and thus exhibit dangerous toxic and reactive properties. Inhalation of fine aluminum oxide particles is associated with Shaver's disease. (Sax, Dangerous Properties of Industrial Materials, eighth edition)

**INHALATION:**

Acute: Toxic by inhalation of dust. Inhalation of finely divided dust may cause coughing, mucous production and shortness of breath.

Chronic: Inhalation of finely divided dust may cause lung damage affecting breathing capacity.

**INGESTION:**

Acute: No acute health effects recorded.

Chronic: No chronic health effects recorded.

**SKIN:** Acute: No acute health effects recorded.

Chronic: No chronic health effects recorded

**EYE:**

Acute: Dust may cause eye irritation.

Chronic: No chronic health effects recorded.

**TARGET ORGANS:** May affect the lungs and respiratory system.

**CARCINOGENICITY:** NTP? No , IARC Monographs? No , OSHA Regulated? No

**CARCINOGENICITY/OTHER INFORMATION**

Questionable carcinogen with experimental neoplastigenic and tumorigenic data by implantation.

**RECOMMENDED EXPOSURE LIMITS:** See "Section II" **LD 50/LC 50:** NE

**SIGNS AND SYMPTOMS OF EXPOSURE**

**INHALATION:** May cause cough, mucous production and shortness of breath.

**INGESTION:** No acute or chronic health effects recorded.

**SKIN:** No acute or chronic health effects recorded.

**EYE:** May cause redness, itching, burning and watering.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE**

Pre-existing respiratory disorders.

#### **EMERGENCY AND FIRST AID PROCEDURES**

INHALATION: Remove victim to fresh air; keep warm and quiet; give oxygen if breathing is difficult and seek medical attention if symptoms persist.

INGESTION: Not applicable

SKIN: Not applicable

EYE: Flush eyes with lukewarm water, lifting upper and lower eyelids, for at least 15 minutes. Seek medical attention.

#### **NOTE TO PHYSICIAN**

No data available.

---

## **SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE**

### **Aluminum oxide, powder, pieces and sputter targets**

#### **STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

Wear appropriate respiratory and protective equipment specified in section 8-Control Measures. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal.

#### **WASTE DISPOSAL METHOD**

Dispose of in accordance with local, state and federal regulations.

**RCRA WASTE ID CODE** NA

#### **HAZARD LABEL INFORMATION:**

Store in cool, dry area                      Store in tightly sealed container

Wash thoroughly after handling

#### **PRECAUTIONS TO BE TAKEN IN HANDLING**

None

#### **PRECAUTIONS TO BE TAKEN IN STORING**

No data available.

#### **OTHER PRECAUTIONS**

None

---

## **SECTION VIII- CONTROL MEASURES**

### **Aluminum oxide, powder, pieces and sputter targets**

#### **PROTECTIVE EQUIPMENT SUMMARY - HAZARD LABEL INFORMATION:**

NIOSH approved respirator   Impervious gloves   Safety glasses

#### **RESPIRATORY EQUIPMENT (SPECIFY TYPE)**

NIOSH - approved respirator

#### **VENTILATION**

Local Exhaust: If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Special: None

Mechanical (Gen): No special ventilation requirements.

Other: None

**EYE PROTECTION**

Safety glasses

**PROTECTIVE GLOVES**

Rubber or vinyl disposable gloves

**OTHER PROTECTIVE CLOTHING**

Protective clothing not necessary for aluminum oxide

**WORK/HYGIENIC/MAINTENANCE PRACTICES**

Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.

---

**SECTION IX - ADDITIONAL COMMENTS**

**Aluminum oxide, powder, pieces and sputter targets**

**SUPERCEDES REVISION** 09/23/2002

Control of Substances Hazardous to Health Regulations  
EH40 Occupational Exposure Limits

Maximum Exposure Limit: NE

Occupational Exposure Standard: 10 mg/m<sup>3</sup> Total Inhalable Dust

5 mg/m<sup>3</sup> Respirable Dust

<b><u>HMIS HAZARD RATINGS:</u></b>		
<b>Health:</b>	<b>1</b>	Minimal: 0
<b>Flammability:</b>	<b>0</b>	Slight: 1
<b>Reactivity:</b>	<b>0</b>	Moderate: 2
Protection:	<b>E</b>	Serious: 3
		Extreme: 4

**DOT PROPER SHIPPING NAME** Not Hazardous

**DOT HAZARD CLASS:** Not regulated by DOT

**DOT HAZARD LABEL:** Not regulated by DOT

**UN/NA NUMBER:** No data

The above information is accurate to the best of our knowledge. However, since data, safety standards, and government regulations are subject to change, and the conditions of handling and use or misuse are beyond our control, BAYVILLE CHEMICAL SUPPLY COMPANY MAKES NO WARRANTY, EITHER EXPRESSED NOR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN, AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. Users should satisfy themselves that they have all current data relevant to their particular use.

Abbreviations used: NA=Not Applicable NE: Not Established

Revision Date: 02/07/2018