## AIKEN CHEMICAL COMPANY, INC.

# Safety Data Sheet Aluminum Brightener

### **SECTION 1: Identification**

#### 1.1 Product identifier

Product name Aluminum Brightener

Product number 4115PS, 4120P, 4125P, 4140

Brand Purple Power

#### 1.3 Recommended use of the chemical and restrictions on use

Cleaning cast aluminum, stainless steel, copper, brass, and fiber glass.

Do not use on sealed, painted, or polished surfaces.

### 1.4 Supplier's details

Name Aiken Chemical Company, Inc.

Address P.O. Box 27147

Greenville, SC 29616

USA

Telephone 864-968-1250 Fax 864-968-1252

Email donnie@clean-rite.com

#### **1.5 Emergency phone number(s)** 1-800-424-9300

### **SECTION 2: Hazard identification**

#### 2.1 Classification of the substance or mixture

- Eye damage/irritation (C.4.5), Cat. 1
- Acute toxicity, inhalation (C.4.3), Cat. 2
- Carcinogenicity (C.4.9), Cat. 1A
- Skin corrosion/irritation (C.4.4), Cat. 1A
- Specific target organ toxicity (repeated exposure) (C.4.12), Cat. 2

#### 2.2 GHS label elements, including precautionary statements

### **Pictogram**



### Signal word Danger

Н	laz	ard	stat	bm	ant	(e)
	ıaz	aıu	Siai	CIII	CIII	ısı

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

H330 Fatal if inhaled

H350 May cause cancer [Inhalation]

H373 May cause damage to organs [kidney, liver lungs and bone] through prolonged or repeated exposure [Eyes, Skin, Inhalation, Ingestion]

Precautionary statement(s)

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P280 Wear eye protection/face protection.

P284 In case of inadequate ventilation, wear respiratory protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P310 Immediately call a POISON CENTER/doctor/if not breathing, not feeling well,

or if rash developes.

P314 Get medical advice/attention if you feel unwell.
P321 Specific treatment : Treat symptomatically.
P363 Wash contaminated clothing before reuse.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with all local, state, and federal

regulations

## Statement regarding ingredients of unknown toxicity

Approximately 46% of the Acid Solution contains ingredients not listed on the SDS and are of unknown acute toxicity.

## **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

### **Hazardous components**

#### 1. Acid Solution

Concentration <= 35 % (weight)

Acute toxicity, inhalation (C.4.3), Cat. 2
Skin corrosion/irritation (C.4.4), Cat. 1A

- Eye damage/irritation (C.4.5), Cat. 1

- Hazardous to the aquatic environment, short-term (acute) (chapter 4.1), Cat. 3 - Hazardous to the aquatic environment, long-term (chronic) (chapter 4.1), Cat. 3

- Carcinogenicity (C.4.9), Cat. 1A

- Specific target organ toxicity (repeated exposure) (C.4.12), Cat. 2

- Corrosive to metals (C.4.29), Cat. 1

H290 May be corrosive to metals H300+H330 Fatal if swallowed or if inhaled

H314 Causes severe skin burns and eye damage

H330 Fatal if inhaled

H350 May cause cancer [route]

H371 May cause damage to organs [organs, route]

2. Water

 Concentration
 <= 65 % (weight)</td>

 EC no.
 215-185-5

 CAS no.
 7732-18-5

### **SECTION 4: First-aid measures**

### 4.1 Description of necessary first-aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

Move out of dangerous area.

If inhaled Remove person to fresh air and keep comfortable for breathing.

If not breathing, give artificial respiration. Consult a physician.

Do NOT induce vomiting. Never give anything by mouth to an unconscious

person. Rinse mouth with water.

In case of skin contact Remove contaminated clothing, jewelry and shoes immediately. Flush

affected area with large amounts of water, then use soap or mild detergent and large amounts of water for 15-20 minutes to cleanse area. Get medical

attention immediately.

In case of eye contact Rinse cautiously with water for several minutes. Remove contact lenses if

present and easy to do. Continue rinsing. Get immediate medical attention.

If swallowed Do NOT induce vomiting. Never give anything by mouth to an unconscious

person. If conscious, give large amounts of water and contact a physician

immediately.

#### 4.2 Most important symptoms/effects, acute and delayed

Effects of Overexposure: May cause severe burns to skin or eyes. Inhalation of mist from hot acid may inure lungs. Ingestion may cause severe injury or death.

#### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

If any symptoms listed above become present and or persist, contact a physician immediately. Treat symptomatically.

### **SECTION 5: Fire-fighting measures**

#### 5.1 Suitable extinguishing media

Use extinguishing media appropriate for surrounding fire.

### 5.2 Specific hazards arising from the chemical

Contact with metals may produce Hydrogen gas.

### 5.3 Special protective actions for fire-fighters

Fire fighters should enter area only if they are protected from all contact with the material. Full protective clothing, including self-contained breathing apparatus, coat, pants, gloves, boots and bands around legs, arms, and waist, should be worn. No skin surfaces should be exposed.

### **SECTION 6: Accidental release measures**

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

Dam spills if possible; then neutralize spill with soda ash or lime. Flush with water to a chemical sewer or disposal system. This neutralization procedure should be conducted with good ventilation. Wear chemical protective clothing, gloves and goggles.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

In order to be completely informed on the latest regulations for your area, please contact the local authorities.

#### Reference to other sections

Use proper personal protective equipment as indicated in Section 8.

### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Ensure adequate ventilation. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

#### Specific end use(s)

Cleans and brightens cast aluminum surfaces.

Cleans stainless steel.

Can be used to clean Copper and Brass.

May be used on fiberglass.

### **SECTION 8: Exposure controls/personal protection**

### **Control parameters**

### 1. Phosphoric Acid (CAS: 7664-38-2)

PEL (Inhalation): 1 mg/m3 (OSHA)

OSHA Annotated Table Z-1 www.osha.gov

Limit val - 8 hr (Inhalation): 1 mg/m3 (Cal/OSHA)

OSHA Annotated Table Z-1 www.osha.gov

STEL (Inhalation): 3 mg/m3 (Cal/OSHA)

OSHA Annotated Table Z-1 www.osha.gov

Limit val - 10 hr (Inhalation): 1 mg/m3 (NIOSH)

OSHA Annotated Table Z-1 www.osha.gov

STEL (Inhalation): 3 mg/m3 (NIOSH)

OSHA Annotated Table Z-1 www.osha.gov

Limit val - 8 hr (Inhalation): 1 mg/m3 (ACGIH)

OSHA Annotated Table Z-1 www.osha.gov

STEL (Inhalation): 3 mg/m3 (ACGIH)

OSHA Annotated Table Z-1 www.osha.gov

#### 2. Sulfuric Acid (CAS: 7664-93-9)

PEL (Inhalation): 1 mg/m3 (OSHA)

OSHA Annotated Table Z-1 www.osha.gov

Limit val - 8 hr (Inhalation): 0.1 mg/m3 (Cal/OSHA)

OSHA Annotated Table Z-1 www.osha.gov

STEL (Inhalation): 3 mg/m3 (Cal/OSHA)

OSHA Annotated Table Z-1 www.osha.gov

Limit val - 10 hr (Inhalation): 1 mg/m3 (NIOSH)

OSHA Annotated Table Z-1 www.osha.gov

Limit val - 8 hr (Inhalation): 0.2 mg/m3 (ACGIH)

OSHA Annotated Table Z-1 www.osha.gov

#### 3. Ammonium Bifluoride (CAS: 1341-49-7)

Limit val - 8 hr (Inhalation): 205 mg (f) /m3 (ACGIH)

OSHA Annotated Table Z-1 www.osha.gov

#### 4. Ethylene Glycol Monobutyl Ether (CAS: 111-76-2)

PEL (Inhalation): 240 mg/m3 (OSHA)

OSHA Annotated Table Z-1 www.osha.gov

Limit val - 8 hr (Inhalation): 20 ppm (Cal/OSHA)

OSHA Annotated Table Z-1 www.osha.gov

Limit val - 10 hr (Inhalation): 5 ppm (NIOSH)

OSHA Annotated Table Z-1 www.osha.gov

Limit val - 8 hr (Inhalation): 20 ppm (ACGIH)

OSHA Annotated Table Z-1 www.osha.gov

#### Appropriate engineering controls

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

#### 8.3 Individual protection measures, such as personal protective equipment (PPE)

### **Pictograms**











### Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

#### **Body protection**

Chemically resistant apron or lab coat

#### **Environmental exposure controls**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## **SECTION 9: Physical and chemical properties**

### Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)

Odor

Odor threshold

Clear/Colorless
Slight acidic odor
No data available.

pH 3.0 - 3.5

Melting point/freezing point No data available. Initial boiling point and boiling range No data available. Flash point No data available. **Evaporation rate** No data available. Flammability (solid, gas) Non flammable Upper/lower flammability limits No data available. Upper/lower explosive limits No data available. Vapor pressure No data available. Vapor density No data available.

Relative density 1.0588

Solubility(ies)

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition temperature

Viscosity

No data available.

### Other safety information

No data available.

## **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

Low reactivity with metals.

#### 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

Low

#### 10.4 Conditions to avoid

Extremely high temperatures

#### 10.5 Incompatible materials

Strong oxidizing agents, Reacts with most common metals to produce hydrogen gas. Is corrosive to many materials including leather, rubber, and many organics. Acids, Bases.

### 10.6 Hazardous decomposition products

Possibility of decomposition if heated and in contact with sources of ignition. Releases of toxic gases and vapors (Sulfur oxides (SO2,SO3)).

Heat above 350C will result in decomposition, releasing hydogen fluoride and ammonia gas. Contact with strong acids will cause hydrogen fluoride to be released; contact with strong alkalis will cause ammonia gas to be released.

## **SECTION 11: Toxicological information**

#### Information on toxicological effects

#### Acute toxicity

Sulfuric Acid:

Oral rat LD50: 2140 mg/kg

Inhalation rat LC50: 510 mg/m3/2h

Standard Draize, eye rabbit, 250 ug (severe).

Ammonium Fluoride

Acute toxicity LD50: 60 - 130 mg/kg - Rat ATE (inhalation, gaseous) of mixture: 200 ppmv

#### Skin corrosion/irritation

Skin corrosion/irritation C.4.4), Cat. 1

#### Serious eye damage/irritation

Eye Damage/irritation (C.4.5), Cat.1

### Respiratory or skin sensitization

No data available.

#### Germ cell mutagenicity

No data available.

#### Carcinogenicity

Strong inorganic acid mists containing sulfuric acid can cause cancer. Risk of cancer depends on duration and level of exposure. Sulfuric acid (Proven for human) by IARC, and (Proven) by OSHA, Classified 2 (suspected for human) by ACGIH.

### Reproductive toxicity

No data available.

### STOT-single exposure

No data available.

#### STOT-repeated exposure

H373: May cause damage to organs [kidney, liver lungs and bone] through prolonged or repeated exposure [Eyes, Skin, Inhalation, Ingestion]

#### Aspiration hazard

No data available.

### **Additional information**

Immediate effects: Severe irritation or burns to skin, eyes and respiratory system

Long term exposure to concentrated vapors may cause erosion of the teeth. Long term exposure seldom due to corrosive properties of the acid.

## **SECTION 12: Ecological information**

### **Toxicity**

Acid Solution:

Fish, Lepomis macrochirus, Sulfuric Acid,LC50-48 h-49 mg/L

Daphnia Magna, Sulfuric Acid-EC50,48 h-60-70 mg/L

### Persistence and degradability

Not Available

#### Bioaccumulative potential

Unlikely

### Mobility in soil

No data avaiilable

#### Results of PBT and vPvB assessment

No data avaiilable

#### Other adverse effects

Sulfuric Acid:

When released into the soil, this material may leach into groundwater. When released into the air, this material may be removed from the atmosphere to a moderate extent by wet deposition. When released into the air, this material may be removed from the atmosphere to a moderate extent by dry deposition.

Sulfuric Acid:

LC50 Flounder 100 to 330 mg/l/48 hr aerated water/Conditions of bio-assay not specified; LC50 Shrimp 80 to 90 mg/l/48 hr. aerated water /Conditions of bio assay not specified; LC50 Prawn 42.5 ppm/48 hr. salt water /Conditions of bio assay not specified.

## **SECTION 13: Disposal considerations**

### Disposal of the product

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

Disposal of contaminated packaging

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

### **SECTION 14: Transport information**

DOT (US)

UN Number: UN1760

Class: 8

Packing Group: II

Proper Shipping Name: CORROSIVE LIQUID N.O.S. (PHOSPHORIC ACID, SULFURIC ACID, AMMONIUM

BIFLUORIDE) ERG: 154

Environmental Hazards (e.g. Marine Pollutant): Yes

**IMDG** 

UN Number: UN1760

Class: 8

Packing Group: II

Proper Shipping Name: CORROSIVE LIQUID N.O.S. (PHOSPHORIC ACID, SULFURIC ACID, AMMONIUM

BIFLUORIDE) ERG: 154

Environmental Hazards (e.g. Marine Pollutant): Yes

**IATA** 

UN Number: UN1760

Class: 8

Packing Group: II

Proper Shipping Name: CORROSIVE LIQUID N.O.S. (PHOSPHORIC ACID, SULFURIC ACID, AMMONIUM

BIFLUORIDE) ERG: 154

Environmental Hazards (e.g. Marine Pollutant): Yes

### **SECTION 15: Regulatory information**

#### 15.1 Safety, health and environmental regulations specific for the product in question

#### **CERCLA**

Sulfuric Acid-RQ=1000 lbs.

### **SARA Hazard Classification**

SARA Tittle III Section 311 Categories: Immediate (Acute) Health Effects: Yes, Delayed (Chronic) Health Effects:

Yes, Fire Hazard: No, Sudden Release of Pressure Hazard: No, Reactivity Hazard: No

\* THIS SUBSTANCE IS A CHEMICAL SUBJECT TO SARA TITLE III, SECTION 313 REPORTING

REQUIREMENTS. Subject to reporting levels established by SARA Title III, Section 302

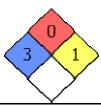
#### 15.2 Chemical Safety Assessment

To our knowledge, No chemical Safety Assessment has been carried out on this product.

### **HMIS Rating**

Aluminum Brightener				
HEALTH	3			
FLAMMABILITY	0			
PHYSICAL HAZARD	0			
PERSONAL PROTECTION	D			

### **NFPA Rating**



### **SECTION 16: Other information**

No RoHS chemicals are contained in this product. REACH SVHC are contained in this product as Nonyl Phenol

#### 16.1 Further information/disclaimer

The information is based on our knowledge to date but does not constitute an assurance of product properties and does not imply a legal contractual relationship. Safety Data Sheet information is based on the Safety Data Sheet provided by the chemical manufacturer.

### 16.2 Preparation information

Donnie Arcaro Aiken Chemical Company, Inc. P.O. Box 27147, Greenville, SC 29616

Local: 864-968-1250 Toll Free: 800-828-1860 Fax: 864-968-1252 Donnie@clean-rite.com