

# Safety Data Sheet



Issue Date 08-Aug-2011

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Version 1.0

## 1. IDENTIFICATION

### Product Identifier

**Product Name** A+ Aluminum Brightener

### Other Means of Identification

**Product Code** TW-0014

### Recommended use of the Chemical and Restrictions on Use

**Recommended Use** Aluminum brightener concentrate. For industrial use.

### Details of the Supplier of the Safety Data Sheet

Perk Products  
42 Industry St.  
Nashville TN, 37210

### Emergency Telephone Number

**Company Phone Number** 615-242-6157  
**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Colorless

**Physical State** Liquid

**Odor** None

### Classification

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 2
Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Corrosive to Metals	Category 1

### Signal Word

**Danger**

### Hazard Statements

Toxic if swallowed.  
Fatal in contact with skin.  
Fatal if inhaled.  
Causes severe skin burns and eye damage.  
May cause cancer.  
May be corrosive to metals.



**Precautionary Statements - Prevention**

Obtain special instructions before use.  
 Do not handle until all safety precautions have been read and understood.  
 Use personal protective equipment as required.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 Wash face, hands and any exposed skin thoroughly after handling.  
 Do not eat, drink or smoke when using this product.  
 Do not get in eyes, on skin, or on clothing.  
 Do not breathe dust/fume/gas/mist/vapors/spray.  
 Use only outdoors or in a well-ventilated area.  
 Wear respiratory protection.  
 Keep only in original container.

**Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 Immediately call a POISON CENTER or doctor/physician.  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 Immediately call a POISON CENTER or doctor/physician.  
 Wash contaminated clothing before reuse.  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 Immediately call a POISON CENTER or doctor/physician.  
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
 Rinse mouth. Do not induce vomiting.  
 IN CASE OF SPILL: Absorb spillage to prevent material damage.

**Precautionary Statements - Storage**

Store locked up.  
 Store in a well-ventilated place. Keep container tightly closed.  
 Store in corrosive resistant container with a resistant innerliner.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant.

**Other Hazards**

Harmful to aquatic life with long lasting effects.

**Unknown Acute Toxicity**

None known.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Water	7732-18-5	60-100
Sulfuric Acid	7664-93-9	10-30
Nonylphenoxypolyethoxyethanol	68412-54-4	1-5
Hydrofluoric Acid	7664-39-3	1-5

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret\*\*

### 4. FIRST-AID MEASURES

**First Aid Measures**

**General Advice** If exposed or concerned: Get medical advice/attention. When seeking medical attention, emphasize exposure to hydrofluoric acid.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove and discard contact lenses. Get immediate medical advice/attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing. Wash contaminated clothing before reuse. Get medical attention immediately.

<b>Inhalation</b>	Remove to fresh air. Get medical attention immediately.
<b>Ingestion</b>	Rinse mouth. Drink plenty of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

**Most Important Symptoms and Effects**

<b>Symptoms</b>	Irritation and corrosive burns to mouth, throat, and stomach. Corrosive to eyes. Prolonged contact may even cause severe skin irritation or mild burn. May cause hypocalcemia. Can also cause bone and joint changes in humans (Fluorosis).
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**Indication of any Immediate Medical Attention and Special Treatment Needed**

<b>Notes to Physician</b>	This product contains hydrofluoric acid.
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**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Water spray (fog). Carbon dioxide (CO<sub>2</sub>). Dry chemical. Foam.

**Unsuitable Extinguishing Media**

Not determined.

**Specific Hazards Arising from the Chemical**

Contents are corrosive and all personal contact must be avoided.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal Precautions, Protective Equipment and Emergency Procedures**

<b>Personal Precautions</b>	Use personal protective equipment as required.
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<b>Environmental Precautions</b>	Avoid release to the environment.
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**Methods and Material for Containment and Cleaning Up**

<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so.
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<b>Methods for Clean-Up</b>	Collect spillage. Collect in a clean, dry waste container for disposal. Dilute with water and clean up.
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**7. HANDLING AND STORAGE****Precautions for Safe Handling**

<b>Advice on Safe Handling</b>	Wash thoroughly after handling. Use personal protection recommended in Section 8. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only in well-ventilated areas.
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**Conditions for Safe Storage, including any Incompatibilities**

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep locked up and out of reach of children. Keep only in original container. Keep from freezing.
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<b>Incompatible Materials</b>	Acids. Bases. Oxidizing agents. Uncontrolled contact with water.
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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sulfuric Acid 7664-93-9	TWA: 0.2 mg/m <sup>3</sup> thoracic fraction	TWA: 1 mg/m <sup>3</sup> (vacated) TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>
Hydrofluoric Acid 7664-39-3	TWA: 0.5 ppm F TWA: 2.5 mg/m <sup>3</sup> F S* Ceiling: 2 ppm F	TWA: 3 ppm F TWA: 2.5 mg/m <sup>3</sup> F TWA: 2.5 mg/m <sup>3</sup> dust (vacated) TWA: 3 ppm F (vacated) TWA: 2.5 mg/m <sup>3</sup> (vacated) STEL: 6 ppm F	IDLH: 30 ppm Ceiling: 6 ppm 15 min Ceiling: 5 mg/m <sup>3</sup> 15 min TWA: 3 ppm TWA: 2.5 mg/m <sup>3</sup>

### Appropriate Engineering Controls

**Engineering Controls** Ventilation systems. Eyewash stations. Showers.

### Individual Protection Measures, such as Personal Protective Equipment

**Eye/Face Protection** Splash goggles or safety glasses.

**Skin and Body Protection** Rubber, Nitrile, PVC, or other chemically resistant skin protection to prevent contact.

**Respiratory Protection** Ensure adequate ventilation, especially in confined areas.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

<b>Physical State</b>	Liquid	<b>Odor</b>	None
<b>Appearance</b>	Clear	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	<1	
<b>Melting Point/Freezing Point</b>	Not known	
<b>Boiling Point/Boiling Range</b>	100.5 °C / 213 °F	
<b>Flash Point</b>	Not applicable	
<b>Evaporation Rate</b>	Not determined	
<b>Flammability (Solid, Gas)</b>	n/a-liquid	
<b>Upper Flammability Limits</b>	Not determined	
<b>Lower Flammability Limit</b>	Not determined	
<b>Vapor Pressure</b>	Not determined	
<b>Vapor Density</b>	Not determined	
<b>Specific Gravity</b>	1.16	
<b>Water Solubility</b>	Completely soluble	@ 25 °C (77 °F)
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Auto-ignition Temperature</b>	Not determined	
<b>Decomposition Temperature</b>	Not determined	
<b>Kinematic Viscosity</b>	Not determined	
<b>Dynamic Viscosity</b>	Not determined	
<b>Explosive Properties</b>	Not determined	
<b>Oxidizing Properties</b>	Not determined	

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to Avoid**

Keep out of reach of children. Keep from freezing.

**Incompatible Materials**

Acids. Bases. Oxidizing agents. Uncontrolled contact with water.

**Hazardous Decomposition Products**

When exposed to fire, produces normal products of combustion.

**11. TOXICOLOGICAL INFORMATION****Information on Likely Routes of Exposure****Product Information**

<b>Eye Contact</b>	Causes severe eye damage.
<b>Skin Contact</b>	Causes severe skin burns. Fatal in contact with skin.
<b>Inhalation</b>	Fatal if inhaled.
<b>Ingestion</b>	Toxic if swallowed.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric Acid 7664-93-9	= 2140 mg/kg ( Rat )	-	= 510 mg/m <sup>3</sup> ( Rat ) 2 h
Nonylphenoxyethoxyethanol 68412-54-4	= 3310 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
Hydrofluoric Acid 7664-39-3	-	-	= 850 mg/m <sup>3</sup> ( Rat ) 1 h = 1276 ppm ( Rat ) 1 h

**Information on Physical, Chemical and Toxicological Effects****Symptoms** Please see section 4 of this SDS for symptoms.**Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure****Carcinogenicity** Note: The agencies below have listed Strong Inorganic Acid Mists, Containing Sulfuric Acid as a known carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sulfuric Acid 7664-93-9	A2	Group 1	Known	X

**Legend****ACGIH (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

**NTP (National Toxicology Program)**

Known - Known Carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

**Numerical Measures of Toxicity**

Not determined

**Unknown Acute Toxicity** None known.**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Harmful to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sulfuric Acid 7664-93-9	-	500: 96 h Brachydanio rerio mg/L LC50 static	-	29: 24 h Daphnia magna mg/L EC50
Nonylphenoxyethoxyethanol 68412-54-4	-	404-706 mg/L	-	-
Hydrofluoric Acid 7664-39-3	-	660: 48 h Leuciscus idus mg/L LC50	-	270: 48 h Daphnia species mg/L EC50

**Persistence/Degradability**

Not determined

**Bioaccumulation**

Not determined

**Mobility**

Chemical Name	Partition Coefficient
Hydrofluoric Acid 7664-39-3	-1.4

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**US EPA Waste Number**

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Hydrofluoric Acid 7664-39-3	U134			U134

**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
Sulfuric Acid 7664-93-9	Toxic Corrosive

**14. TRANSPORT INFORMATION****Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**

UN3264, Corrosive Liquid, Acidic, Inorganic, NOS (Containing Hydrofluoric Acid and Sulfuric Acid), 8, PG II

**IATA****IMDG****Marine Pollutant**

This material may meet the definition of a marine pollutant

**15. REGULATORY INFORMATION**

**International Inventories**

Not determined

**US Federal Regulations****CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sulfuric Acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ
Hydrofluoric Acid 7664-39-3	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ

**SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Reactive Hazard	Yes

**SARA 313**

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Sulfuric Acid	7664-93-9	10-30	1.0
Hydrofluoric Acid	7664-39-3	1-5	1.0

**CWA (Clean Water Act)**

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sulfuric Acid 7664-93-9	1000 lb			X
Hydrofluoric Acid 7664-39-3	100 lb			X

**US State Regulations****U.S. State Right-to-Know Regulations**

Chemical Name	State List
Sulfuric Acid 7664-93-9	CAP65, MA, NJ, PA
Hydrofluoric Acid 7664-39-3	MA, NJ, PA

AZ – Arizona Ambient Air Quality Guidelines  
 CT – Connecticut Hazardous Air Pollutants  
 CA – California Director's List of Hazardous Substances  
 CAP65 – California Prop 65  
 FL – Florida Substances List  
 ID – Idaho Non-Carcinogen Toxic Air Pollutants

IL – Illinois Toxic Air Contaminant- Carcinogenic  
 MA – Massachusetts Right to Know List  
 MN – Minnesota Hazardous Substances List  
 NJ – New Jersey Right to Know List  
 PA – Pennsylvania Right to Know List  
 RI – Rhode Island Hazardous Substances List

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	Not determined	Not determined	Not determined	Not determined
<b><u>HMIS</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	4	0	1	Not determined

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**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.

**Keep Out of Reach of Children. For Industrial and Institutional Use Only.**

\*Denotes changes from last version.

**End of Safety Data Sheet**