



CASWELL INC

## Safety Data Sheet Aluminum Blackener

---

### SECTION 1: Identification

#### 1.1 Product identifier

Product name	Aluminum Blackener
Product number	A385
Brand	CASWELL

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

Metal Blackening of Aluminum

#### 1.4 Supplier's details

Name	Caswell Inc
Address	7696 Route 31 Lyons, NY 14489 USA
Telephone	315 946 1213
Fax	315 946 4456
email	sales@caswellplating.com

#### 1.5 Emergency phone number(s)

Office Hours (9-4ET): 315 946 1213  
24 Hour: CHEMTEL US# 1-800-255-3924 Int# +01-813-248-0585

---

### SECTION 2: Hazard identification

#### 2.1 Classification of the substance or mixture

- Skin corrosion/irritation (chapter 3.2), Cat. 2
- Eye damage/irritation (chapter 3.3), Cat. 2A
- Carcinogenicity (chapter 3.6), Cat. 1A
- Hazardous to the aquatic environment - long-term hazard (chapter 4.1), Cat. 3
- Hazardous to the aquatic environment - acute hazard (chapter 4.1), Cat. 3

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

Pictogram

# Safety Data Sheet

## Aluminum Blackener



### Signal word

**Danger**

### Hazard statement(s)

H315  
H350  
H412  
H402  
H319

Causes skin irritation  
May cause cancer  
Harmful to aquatic life with long lasting effects  
Harmful to aquatic life  
Causes serious eye irritation

### Precautionary statement(s)

P260  
P264  
P280  
P301+P330+P331  
P303+P361+P353

P363  
P304+P340  
P310  
P321  
P305+P351+P338

P405  
P501  
P270  
P301+P310  
P330  
P273  
P201  
P202  
P308+P313  
P302+P352  
P332+P313  
P362+P364  
P337+P313

Do not breathe dust/fume/gas/mist/vapours/spray.  
Wash thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
Wash contaminated clothing before reuse.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor/...  
Specific treatment (see info on this label).  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
Store locked up.  
Dispose of contents/container per local regulations  
Do not eat, drink or smoke when using this product.  
IF SWALLOWED: Immediately call a POISON CENTER/doctor/...  
Rinse mouth.  
Avoid release to the environment.  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
IF exposed or concerned: Get medical advice/attention.  
IF ON SKIN: Wash with plenty of water/...  
If skin irritation occurs: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.  
If eye irritation persists: Get medical advice/attention.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Hazardous components

##### 1. WATER

Concentration 85 - 95 %  
CAS no. 7732-18-5

##### 2. Ammonium dimolybdate

Concentration 3 %

# Safety Data Sheet

## Aluminum Blackener

CAS no. 27546-07-2

### 3. SELENIOUS ACID

Concentration 1 - 4 %  
CAS no. 7783-00-8

### 4. COPPER SULFATE PENTAHYDRATE

Concentration 3 %  
CAS no. 7758-99-8

### 5. Sulfuric acid (<10%)

Concentration 3 %  
EC no. 231-639-5  
CAS no. 7664-93-9  
Index no. 016-020-00-8

- Skin corrosion/irritation (chapter 3.2), Cat. 1A

H314 Causes severe skin burns and eye damage

---

## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

General advice	Substance can cause cancer.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash off with soap and plenty of water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Personal protective equipment for first-aid responders	See section 8

---

## SECTION 5: Fire-fighting measures

### 5.1 Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Specific hazards arising from the chemical

May produce toxic selenious fumes. Reactions with organics and strong reducing agents can produce volatile organoselenides or hydrogen selenide.

---

## SECTION 6: Accidental release measures

# Safety Data Sheet

## Aluminum Blackener

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

SMALL SPILLS: Contain and absorb with absorbent material and place into containers for later disposal. Wash site of spillage thoroughly with water. LARGE SPILLS: Dike far ahead of spill to prevent further movement. Recover by pumping or by using a suitable absorbent material and place into containers for later disposal. Dispose in suitable waste container.

---

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

---

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### 1. Ammonium dimolybdate (CAS: 27546-07-2)

(Inhalation): 0.5mg/m<sup>3</sup> (ACGIH)

#### 2. SELENIOUS ACID (CAS: 7783-00-8)

(Inhalation): 0.2mg/m<sup>3</sup> (ACGIH)

#### 3. Sulfuric acid (<10%) (CAS: 7664-93-9 EC: 231-639-5)

(Inhalation): 0.2mg/m<sup>3</sup> (ACGIH)

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

#### Pictograms



#### Eye/face protection

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

#### Skin protection

Wear chemical resistant gloves and clothing.

#### Respiratory protection

NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

---

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Blue Liquid
Odor	Odorless
Odor threshold	Not Available
pH	0-2.85
Melting point/freezing point	32 deg F
Initial boiling point and boiling range	212 deg F
Flash point	Not Available

# Safety Data Sheet

## Aluminum Blackener

Evaporation rate	1
Flammability (solid, gas)	Not Available
Upper/lower flammability limits	Not Available
Vapor pressure	20
Vapor density	Approx equal to water
Relative density	1.05-1.068
Solubility(ies)	Soluble In Water
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available
Viscosity	Not Available
Explosive properties	Not Available
Oxidizing properties	Not Available

---

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

Not Reactive

#### 10.2 Chemical stability

Stable

#### 10.4 Conditions to avoid

Extreme Heat

#### 10.5 Incompatible materials

Cyanides, organic solvents, strong reducing agents

---

### SECTION 11: Toxicological information

#### Information on toxicological effects

##### Acute toxicity

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Water(7732-18-5)Oral LD50Rat>90 mL/kg

Copper(II) sulfate, pentahydrate (1:1:5)(7758-99-8)Oral LD50Rat960 mg/kgDermal LD50Rabbit1000 mg/kg (related toSulfuric acid, copper(2+) salt (1:1))

Sulfuric acid(7664-93-9)Oral LD50Rat2140 mg/kgInhalation LC50Rat510 mg/m<sup>3</sup> 2 h

##### Carcinogenicity

Molybdate Diammonium: A3 - Confirmed animal with unknown relevance to Humans

---

### SECTION 12: Ecological information

#### Toxicity

Copper(II) sulfate, pentahydrate (1:1:5)7758-99-8

Fish:LC50 96 h Lepomis macrochirus 0.66 -1.15 mg/L [semi-static];LC50 96 h

Lepomis macrochirus 0.96 -1.8 mg/L [static]; LC50 96 h

Oncorhynchus mykiss 0.1478 -0.165 mg/L [flow-through]; LC50 96 h

Oncorhynchus mykiss 0.09 -0.19 mg/L [static]; LC50 96 h

Pimephales promelas 0.6752 mg/L [static]

Invertebrate:EC50 48 h Daphnia magna0.147 -0.227 mg/L [static] EPA

Sulfuric acid7664-93-9

# Safety Data Sheet

## Aluminum Blackener

Fish:LC50 96 h Brachydanio rerio >500 mg/L [static]

---

### SECTION 13: Disposal considerations

#### Disposal of the product

Consult appropriate federal and local regulations for disposal. Empty containers are subject to the same regulations.

---

### SECTION 14: Transport information

#### DOT (US)

UN Number: UN1760

Class: 8

Packing Group: II

Proper Shipping Name: Corrosive Liquid, NOS (Sulfuric Acid, Selenious Acid)

Reportable quantity (RQ): 335 lbs

Small quantities may be shipped as Limited Quantities. Consult 49 CFR.

#### IMDG

UN Number:

Class:

Packing Group:

EMS Number:

Proper Shipping Name:

#### IATA

UN Number: UN1760

Class: 8

Packing Group: II

Proper Shipping Name: Corrosive Liquid, NOS (Sulfuric Acid, Selenious Acid)

---

### SECTION 15: Regulatory information

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

##### Massachusetts Right To Know Components

Chemical name: Selenious acid

CAS number: 7783-00-8

##### New Jersey Right To Know Components

Common name: SELENOUS ACID

CAS number: 7783-00-8

##### Pennsylvania Right To Know Components

Chemical name: Selenous acid

CAS number: 7783-00-8

##### Massachusetts Right To Know Components

Chemical name: Copper

CAS number: 7440-50-8

##### New Jersey Right To Know Components

Common name: COPPER

CAS number: 7440-50-8

##### Pennsylvania Right To Know Components

Chemical name: Copper

CAS number: 7440-50-8

# Safety Data Sheet

## Aluminum Blackener

### Massachusetts Right To Know Components

Chemical name: Sulfuric acid

CAS number: 7664-93-9

### New Jersey Right To Know Components

Common name: SULFURIC ACID

CAS number: 7664-93-9

### Pennsylvania Right To Know Components

Chemical name: Sulfuric acid

CAS number: 7664-93-9

### California Prop. 65 components

Chemical name: Sulfuric acid (<10%)

CAS number: 7664-93-9

03/14/2003 - Cancer

### HMIS Rating

Aluminum Blackener	
HEALTH	* 2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	C

### NFPA Rating



---

## SECTION 16: Other information

### 16.1 Further information/disclaimer

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall Caswell Inc be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if Caswell Inc has been advised of the possibility of such damages.

### 16.2 Preparation information

L CASWELL