

Safety Data Sheet Chocolate Brown Oxidizer

SECTION 1: Identification

1.1 Product identifier

| | |
|----------------|--------------------------|
| Product name | Chocolate Brown Oxidizer |
| Product number | A312 |
| Brand | CASWELL |

1.2 Other means of identification

Blue liquid

1.3 Recommended use of the chemical and restrictions on use

Metal Blackening of Steel & Iron

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 Intl# +01-813-248-0585

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

- Acute toxicity, inhalation (chapter 3.1), Cat. 4
- Skin corrosion/irritation (chapter 3.2), Cat. 1
- Eye damage/irritation (chapter 3.3), Cat. 1
- Hazardous to the aquatic environment - acute hazard (chapter 4.1), Cat. 1
- Hazardous to the aquatic environment - long-term hazard (chapter 4.1), Cat. 1

2.2 GHS label elements, including precautionary statements

Pictogram

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Signal word

Danger

Hazard statement(s)

| | |
|------|--|
| H332 | Harmful if inhaled |
| H314 | Causes severe skin burns and eye damage |
| H318 | Causes serious eye damage |
| H400 | Very toxic to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |

Precautionary statement(s)

| | |
|----------------|---|
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P312 | Call a POISON CENTER/doctor/... if you feel unwell. |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P264 | Wash ... thoroughly after handling. |
| P280 | Wear protective gloves/protective clothing/eye protection/face 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. |
| P363 | Wash contaminated clothing before reuse. |
| P310 | Immediately call a POISON CENTER/doctor/... |
| P321 | Specific treatment (see ... on this label). |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container to ... |
| P273 | Avoid release to the environment. |
| P391 | Collect spillage. |

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. WATER OR OTHER NON-REPORTABLE INGREDIENTS

| | |
|---------------|--------------------|
| Concentration | 85 - 90 % (Weight) |
| CAS no. | 7732-18-5 |

2. Copper powder

| | |
|---------------|--------------------|
| Concentration | 3 - < 6 % (Weight) |
| CAS no. | 7440-50-8 |

3. Phosphoric acid liquid

| | |
|---------------|------------------|
| Concentration | 1 - 3 % (Weight) |
| EC no. | 231-633-2 |

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CAS no. 7664-38-2
Index no. 015-011-00-6

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

H314 Causes severe skin burns and eye damage

4. SELENIOUS ACID

Concentration 0.75 - < 0.99 % (Weight)
CAS no. 7783-00-8

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

| | |
|-------------------------|---|
| General advice | Substance can cause severe skin, eye and respiratory tract irritation/nurning. Corrosive. Will cause eye burns and permanent tissue damage. |
| 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. |

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

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.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Phosphoric acid (CAS: 7664-38-2)

PEL (Inhalation): 1 mg/m³ (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

2. Phosphoric acid (CAS: 7664-38-2)

PEL (Inhalation): 1 mg/m³, (ST) 3 mg/m³ (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

3. Phosphoric acid (CAS: 7664-38-2)

REL (Inhalation): 1 mg/m³, (ST) 3 mg/m³ (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

4. Copper, Fume (as Cu) (CAS: 7440-50-8)

PEL (Inhalation): 0.1 mg/m³ (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

5. Copper, Fume (as Cu) (CAS: 7440-50-8)

PEL (Inhalation): 0.1 mg/m³ (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

6. Copper, Fume (as Cu) (CAS: 7440-50-8)

REL (Inhalation): 0.1 mg/m³ (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

7. Copper, Dusts and mists (as Cu) (CAS: 7440-50-8)

PEL (Inhalation): 1 mg/m³ (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

8. Copper, Dusts and mists (as Cu) (CAS: 7440-50-8)

PEL (Inhalation): 1 mg/m³ (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

9. Copper, Dusts and mists (as Cu) (CAS: 7440-50-8)

REL (Inhalation): 1 mg/m³ (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

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.

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SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| | |
|---|-----------------------|
| Appearance/form (physical state, color, etc.) | Blue Liquid |
| Odor | |
| Odor threshold | |
| pH | 0-2.5 |
| Melting point/freezing point | 32 deg F |
| Initial boiling point and boiling range | 220 deg F |
| Flash point | |
| Evaporation rate | 1 |
| Flammability (solid, gas) | |
| Upper/lower flammability limits | |
| Vapor pressure | |
| Vapor density | Approx equal to water |
| Relative density | 1.03-1.107 |
| Solubility(ies) | Soluble In Water |
| Partition coefficient: n-octanol/water | |
| Auto-ignition temperature | |
| Decomposition temperature | |
| Viscosity | |
| Explosive properties | |
| Oxidizing properties | |

SECTION 10: Stability and reactivity

10.2 Chemical stability

Stable

10.5 Incompatible materials

Cyanides, organic solvents, strong reducing agents

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. It causes conjunctivitis leading eventually to an allergic type of reaction of the eyes. Acute selenium poisoning produces central nervous system effects, which include nervousness, convulsions, and drowsiness. Other signs of gastrointestinal distress, teeth that are discolored or decayed, odorous (garlic-like) breath, and partial loss of hair and nails. Chronic exposure by inhalation can produce symptoms that include pallor, coating of the tongue, anemia, irritation of the mucosa, lumbar pain, liver and spleen damage, as well as any of the other previously mentioned symptoms

Carcinogenicity

Phosphoric Acid is suspected of causing cancer

SECTION 12: Ecological information

Toxicity

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Copper Sulfate:
Fish: LC50 96h
Invertebrate: EC50 48h

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 (Phosphoric 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 (Phosphoric 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: Phosphoric acid
CAS number: 7664-38-2

New Jersey Right To Know Components

Common name: PHOSPHORIC ACID
CAS number: 7664-38-2

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

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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

Massachusetts Right To Know Components

Chemical name: Nitric acid
CAS number: 7697-37-2

New Jersey Right To Know Components

Common name: NITRIC ACID
CAS number: 7697-37-2

Pennsylvania Right To Know Components

Chemical name: Nitric acid
CAS number: 7697-37-2

WARNING! This product contains a chemical known to the State of California to cause cancer.

Chemical Name: Phosphoric Acid

HMIS Rating

| Chocolate Brown Oxidizer | |
|--------------------------|-----|
| 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

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