

**Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Name: ASTM E407-210 Klemms I  
Part Number: ETCH-ASTM210 (all sizes)  
Relevant Use: Laboratory Chemicals  
Manufacturer: Sturbridge Metallurgical Services Inc.  
City, State, Zip: Sturbridge MA 01566  
Phone Number: 508-347-5288  
Emergency Phone: **CHEMTREC 1-800-424-9300**

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**Section 2: Hazard(s) Identification**

**Hazardous classification of the substance or mixture:**

| Hazard Class       | Category code |
|--------------------|---------------|
| Serious Eye Damage | 1             |

**Pictogram:**



**Signal word:** Danger

**Hazard Statements:**

H318- Causes serious eye damage.

**Precautionary Statements:**

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

**Response Statements:**

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 – Immediately call a POISON CENTER / Doctor / if victim feels unwell.

**Storage Statement:**

P405-Store locked up

**Disposal statement:**

P501-Dispose of contents in accordance with local, state, federal and international regulations.

**Other hazards:** None

**HMIS Ratings:**

Health: 2  
Flammability: 0  
Reactivity: 2

**NFPA Ratings:**

Health: 2  
Flammability: 0  
Reactivity: 2  
Contact Rating: 2

**Potential Health Effect:**

**Inhalation:** May cause irritation to the respiratory tract. Symptoms may include coughing and shortness of breath. Use of bronchodilators preserved with sulfites can cause allergic reactions.

**Ingestion:** Low level of toxicity by ingestion. Diarrhea may occur by ingestion of large quantities.

**Skin Contact:** May cause irritation and possibly dermatitis.

**Eye Contact:** May cause irritation, redness and pain.

**Chronic Exposure:** Chronic exposure may cause skin effects.

**Aggravation of Pre-existing Conditions:** Some asthmatics are said to be dangerously sensitive to minute amounts of sulfites in foods and some bronchodilator medications preserved with sulfites.

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### Section 3: Composition/Information on Ingredients

| Chemical Name           | CAS No.    | % Concentration |
|-------------------------|------------|-----------------|
| Sodium Thiosulfate      | 7772-98-7  | 25-50%          |
| Potassium Metabisulfite | 16731-55-5 | 5-10            |
| Water                   | 7732-18-5  | 70-85           |

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### Section 4: First-Aid Measures

#### First-aid measures general

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area

#### First-aid measures after inhalation

Remove to fresh air. Get medical attention for any breathing difficulty.

#### First-aid measures after skin contact

Wash exposed area with soap and water. Get medical advice if irritation develops.

#### First-aid measures after eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and get medical advice if irritation develops.

#### First-aid measures after ingestion

Induce vomiting immediately as directed by medical personnel. Get medical attention.

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### Section 5: Fire-Fighting Measures

#### Suitable extinguishing media

Use any means suitable for extinguishing surrounding fire.

#### Special hazards arising from the substance or mixture

Not considered to be a fire hazard, however, may ignite in milling, grinding and other conditions of high friction. Toxic gases are given off in a fire.

#### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### Further Information

Not considered to be an explosion hazard.

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### Section 6: Accidental Release Measures

#### Personal Precautions, Protective Equipment and Emergency Procedures

Use personal protective equipment. Ventilate area of leak or spill.

For personal protection see section 8.

#### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

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### Section 7: Handling and Storage

#### Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapours or mist.

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

Keep container tightly closed, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues. Observe all warnings and precautions listed for the product.

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### Section 8: Exposure Controls/Personal Protection Exposure Limits

**Airborne Exposure Limits:** None established

#### Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

#### Personal Respirators (NIOSH Approved):

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

#### Skin Protection:

Wear protective gloves and clean body-covering clothing.

#### Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

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### Section 9: Physical and Chemical Properties

**Physical state:** Liquid

**Appearance:** Form: liquid, clear

**Color:** colorless

**Odor:** Sulfur dioxide

**Odor Threshold:** No data available

**pH:** No data available

**Melting Point:** 48C (118F) Loses water @ 100C (212F)

**Freezing Point:** No data available

**Boiling Point:** > 100C (> 212F)

**Flash Point:** No data available

**Relative evaporation rate:** No data available

**Flammability (solid, gas):** No data available

**Explosion limits:** No data available  
**Explosive properties** No data available  
**Oxidizing properties** No data available  
**Vapor pressure:** No data available  
**Vapor density:** No data available  
**Density:** 1.75 – 1.9  
**Water Solubility:** 79g/100 ml water @ 4C (39F)  
**Auto-ignition temperature:** No data available  
**Decomposition temperature:** No data available  
**Viscosity:** No data available  
**Explosive properties:** No data available  
**Oxidizing properties:** No data available  
**Other:** No data available

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### Section 10: Stability and Reactivity

**Reactivity:** No data available  
**Chemical stability:** Stable under recommended use and storage conditions. Stability limited in solution.  
**Possibility of hazardous reactions:** No data available  
**Conditions to avoid:** Heat, moisture, air, incompatibles  
**Incompatibilities:** Sodium nitrate, halogens, and oxidizing agents. Strong acids, water, most common metals, and nitrates. Reacts with acid to release sulfur dioxide.  
**Hazardous Decomposition Products:** Oxides of sulfur and hydrogen sulfide. Reaction with acids may release sulfur dioxide.

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### Section 11: Toxicological Information:

No LD50/LC50 information found relating to normal routes of occupational exposure.

---NTP Carcinogen--

| Ingredient              | Known | Anticipated | IARC Category |
|-------------------------|-------|-------------|---------------|
| Sodium Thiosulfate      | No    | No          | None          |
| Potassium Metabisulfite | No    | No          | 3             |
| Water                   | No    | No          | None          |

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### Section 12: Ecological Information

**Environmental Fate:** No information found

**Environmental Toxicity:** No information found

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### Section 13: Disposal Considerations

Dispose in a safe manner in accordance with all local/national regulations. Dispose of contents/container in accordance with all federal, state, and local health and environmental regulations.

Avoid release to the environment.

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### Section 14: Transportation Information

**DOT (CFR49)** Not Regulated  
**IATA (air)** Not Regulated  
**IMDG (ocean)** Not Regulated  
**Hazard Classification** Non Hazardous  
**Packing Group** Not Regulated  
**UN/NA Code** Not Regulated

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**Section 15: Regulatory Information**

**SARA 302 Components**

The following components are subject to reporting levels established by SARA Title III, Section 302:  
None

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

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**Section 16: Other Information**

**Disclaimer:** The information above is believed to be accurate and represents the best information currently available to us. SMS, Inc. makes no warranty, express or implied, as to its accuracy, and we assumes no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. We shall not be liable for any damages to person or property resulting from its use.

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