

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

Product Name: 35% Hydrogen Peroxide Solution  
Part Number: ETCH-H2O2 (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
Oxidizing Liquids	2
Acute toxicity, Oral	4
Skin corrosion	1A
Serious eye damage	1
Acute aquatic toxicity	3

**Pictogram:**



**Signal word:** Danger

**Hazard Statements:**

H272- May intensify fire; oxidiser.  
H302- Harmful if swallowed.  
H314- Causes severe skin burns and eye damage.  
H318- Causes serious eye damage.  
H402- Harmful to aquatic life.

**Precautionary Statements:**

P210- Keep away from heat.  
P220- Keep/Store away from clothing/ combustible materials.  
P221- Take any precaution to avoid mixing with combustibles.  
P264- Wash skin thoroughly after handling.  
P270- Do not eat, drink or smoke when using this product.  
P273- Avoid release to the environment.  
P280- Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response Statements:**

P301 + P312 + P330- IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.  
P301 + P330 + P331- F 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 + P310- IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON

CENTER or doctor/ physician.

P305 + P351 + P338 + P310- 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.

P363- Wash contaminated clothing before reuse.

P370 + P378- In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**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: 3

Flammability: 0

Reactivity: 2

Chronic Health Hazard: \* Special Hazard: OX

**NFPA Ratings:**

Health: 3

Flammability: 0

Reactivity: 2

Special Hazard: OX

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**Section 3: Composition/Information on Ingredients**

Chemical Name	CAS No.	% Concentration
Hydrogen Peroxide	7722-84-1	>=30 - < 50%
Water	7732-18-5	Balance

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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**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**First-aid measures after skin contact**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

**First-aid measures after eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

**First-aid measures after ingestion**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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**Section 5: Fire-Fighting Measures**

**Suitable extinguishing media**

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

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

Oxygen

Nature of decomposition products not known.

**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Further Information**

Use water spray to cool unopened containers.

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**Section 6: Accidental Release Measures**

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

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

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**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

**Reference to other sections**

For disposal see section 13.

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**Section 7: Handling and Storage**

**Precautions for safe handling**

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

Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition. For precautions see section 2.2.

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

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.

Recommended storage temperature 2 - 8 °C

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

Component	CAS No.	ACGIH TLV	OSHA PEL
Hydrogen Peroxide	7722-84-1	1.4 mg/m <sup>3</sup> (TWA)	1.4 mg/m <sup>3</sup>
Water	7732-18-5	NA	NA

**Personal protective equipment**

**Eye/face protection**-Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**- Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Full contact**

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

**Splash contact**

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

**Control of environmental exposure**

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

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**Section 9: Physical and Chemical Properties**

**Physical state:** Liquid  
**Appearance:** Form: liquid, clear  
**Color:** colorless  
**Odor:** No data available  
**Odor Threshold:** No data available  
**pH:** No data available  
**Melting Point:** -40 °C  
**Freezing Point:** (-40 °F)  
**Boiling Point:** 126 °C (259 °F) at 1,013 hPa (760 mmHg)  
**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:** 31.1 hPa (23.3 mmHg) at 30 °C (86 °F)  
**Vapor density:** 1.17 - (Air = 1.0)  
**Relative density:** 1.130 g/cm<sup>3</sup>  
**Water Solubility:** No data available  
**Auto-ignition temperature:** No data available  
**Decomposition temperature:** No data available  
**Viscosity:** No data available  
**Explosive properties:** No data available  
**Oxidizing properties:** The substance or mixture is classified as oxidizing with the category 2  
**Other:** Relative vapor density 1.17 – (Air = 1.0)

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## Section 10: Stability and Reactivity

**Reactivity:** No data available  
**Chemical stability:** Stable under recommended storage conditions.  
**Possibility of hazardous reactions:** No data available  
**Conditions to avoid:** No data available  
**Incompatibilities:** Brass, Copper, Powdered metals, Iron, Iron and iron salts.  
**Hazardous Decomposition Products:** Other decomposition products - No data available In the event of fire: see section 5

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## Section 11: Toxicological Information:

**Acute Toxicity –** No data available  
**Inhalation:** No data available  
**Dermal:** No data available  
**Skin corrosion/irritation:** No data available  
**Respiratory or skin sensitization:** No data available  
**Germ cell mutagenicity** No data available

### Carcinogenicity

**IARC:** 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrogen peroxide)  
**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA

**Reproductive toxicity:** No data available

**Specific target organ toxicity:** - single exposure No data available

**Specific target organ toxicity:** - repeated exposure No data available

**Aspiration hazard:** No data available

**Additional Information:** RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence (Hydrogen peroxide)

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## Section 12: Ecological Information

**Toxicity-**No data available

**Ecology – water:** Harmful to aquatic life.

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

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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

### Department of Transportation (DOT, United States of America)

UN number: 2014

Class: 5.1 (8)

Packing Group: II

Proper Shipping Name: Hydrogen Peroxide, aqueous solutions

Poison inhalation hazard: No

### IMDG and IATA

UN number: 2014

Class: 5.1 (8)

Packing group: II

Proper shipping name: HYDROGEN PEROXIDE, AQUEOUS SOLUTION

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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:

Hydrogen Peroxide      CAS No. 7722-84-1

**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**

Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right to Know Components**

Hydrogen Peroxide      CAS No. 7722-84-1

**Pennsylvania Right to Know Components**

Hydrogen Peroxide      CAS No. 7722-84-1

Water                      CAS No. 7732-18-5

**New Jersey Right to Know Components**

Hydrogen Peroxide      CAS No. 7722-84-1

Water                      CAS No. 7732-18-5

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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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.