CORCO CHEMICAL CORPORATION

Manufacturers of ACS Reagents and Semiconductor Grade Chemicals

SAFETY DATA SHEET

Hydrogen Peroxide, 3% (w/w)

1. IDENTIFICATION

Product identifier: Hydrogen Peroxide, 3% (w/w)

Product Code Number: 1402

Company Identification:

Corco Chemical Corporation
299 Cedar Lane
Fairless Hills, PA 19030
Phone: 215-295-5006
Fax: 215-295-0781

24 Hour Emergency Telephone Number:

CHEMTREC (U.S.): 1-800-424-9300
CHEMTREC (Outside U.S. 1-703-527-3887

Trade Name:	**Hydrogen Peroxide, 3% (w/w)**
Synonyms:	**Peroxide**
Chemical Formula:	**H2O2**
Product Use:	**Process chemical, Laboratory and scientific research and development**

2. HAZARD(S) IDENTIFICATION

Physical hazards:	**Not classified**	
Health hazards:	**Skin corrosion/irritation**	**Category 2**
	Serious eye damage/eye irritation	**Category 1**
OSHA hazard(s):	**Toxic inhalation, Toxic by ingestion, Corrosive**	

Label elements

Signal word **Danger**

Hazard statement: Causes skin irritation. Causes serious eye damage and irritation.

Precautionary statement: Wash skin thoroughly after handling. Wear protective gloves/ eye protection/ face protection. IF ON SKIN: Wash with plenty of soap and water. 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 skin irritation occurs: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.

3. Composition/information on ingredients

CAS Number: 7722-84-1
EC Number: 231-765-0
Index Number: 008-003-00-9
Molecular Weight: 34.01 g/mol

Ingredient	CAS Number	EC Number	Percent	Hazardous	Chemical Characterization
Hydrogen Peroxide	7722-84-1	231-765-0	3%	Yes	Mixture
Water Balance	7732-18-5	231-791-2	97%	No	Mixture

4. First-aid measures

Description of first aid measures:

If inhaled: If breathing, 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. Continue rinsing eyes during transport to hospital.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed: No data available.

Indication of any immediate medical attention and special treatment needed: No data available.

5. Fire-fighting measures

Suitable extinguishing media: Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: None known.

Special protective equipment and precaution for firefighters: Wear self contained breathing apparatus for fire fighting if necessary.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions: Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

Methods and material for containment and cleaning up: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Neutralize spill with sodium bicarbonate or lime.

7. Handling and storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapor.

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. Light sensitive.

8. Exposure controls/personal protection

Control parameters:

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000):

Components	Type	Value
HYDROGEN PEROXIDE (CAS 7722-84-1)	PEL	1.4 mg/m3 1 ppm

US. ACGIH Threshold Limit Values:

Components	Type	Value
HYDROGEN PEROXIDE (CAS 7722-84-1)	TWA	1 ppm

US. NIOSH: Pocket Guide to Chemical Hazards:

Components	Type	Value
HYDROGEN PEROXIDE (CAS 722-84-1)	TWA	1.4 mg/m3 1 ppm

Biological limit values: No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment:

Eye/face protection Chemical goggles are recommended. Eye wash fountain is recommended.

Skin and Hand protection: Wear protective gloves. Wear appropriate chemical resistant clothing.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance:	**Clear**
Physical state:	**Liquid**
Form:	**Aqueous solution**
Color:	**Colorless**
Odor:	**odorless**
Odor threshold:	**Not available**
pH:	**4 - 6**
Melting point/freezing point:	**< 32 °F (< 0 °C)**
Initial boiling point and boiling range:	**> 212 °F (> 100 °C)**
Flash point:	**Not available**
Evaporation rate:	**Not available**
Flammability (solid, gas):	**Not applicable**
Flammability limit – lower %	**Not available**
Flammability limit - upper (%)	**Not available**
Explosive limit – lower (%)	**Not available**
Explosive limit – upper (%)	**Not available**
Vapor density:	**Not available**
Relative density:	**Not available**
Solubility(ies):	**Not available**
Partition coefficient (n-octanol/water):	**Not available**
Auto-ignition temperature:	**Not available**
Decomposition temperature:	**Not available**
Viscosity:	**Not available**

10. Stability and reactivity

Reactivity and / or Chemical Stability: Normally stable if uncontaminated, but slowly decomposes to release Oxygen. Unstable with heat, may result in dangerous pressures. A strong oxidizer, reacts violently upon contact with many organic substances, particularly textile and paper. Avoid light and keep in a closed but vented container to prevent evaporation (concentration) and contamination.

Possibility of Hazardous Reactions and Conditions to Avoid: Excessive heat, light, incompatibles, and contact with combustible or organic materials.

Incompatible Materials: Heat, reducing agents, organic materials, dirt, alkalis, rust, and many metals. Spontaneous combustion may occur on standing in contact with readily flammable materials.

Hazardous Decomposition Products: Decomposes to Water and Oxygen with rapid heat release. Use vented containers. The solution can decompose violently upon heating.

11. Toxicological information

Emergency Overview: DANGER! STRONG OXIDIZER. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE. CORROSIVE. CAUSES BURNS TO SKIN, EYES, AND RESPIRATORY TRACT. HARMFUL IF SWALLOWED OR INHALED.

Potential Health Effects:

Inhalation: Vapors are corrosive and irritating to the respiratory tract. Inhalation of mist may burn the mucous membrane of the nose and throat. In severe cases, exposures may result in pulmonary edema and death.

Ingestion: Corrosive and irritating to the mouth, throat, and abdomen. Large doses may cause symptoms of abdominal pain, vomiting, and diarrhea as well as blistering or tissue destruction. Stomach distention (due to rapid liberation of Oxygen,) and risk of stomach perforation, convulsions, pulmonary edema, coma, possible cerebral edema (fluid on the brain,) and death are possible.

Skin Contact: Corrosive! Can cause redness, pain, and severe skin burns.

Eye Contact: Corrosive! Vapors are very corrosive and irritating to the eyes. Symptoms include pain, redness and blurred vision. Splashes can cause permanent tissue destruction.

Chronic Exposure: No information found.

Aggravation of Pre-existing Conditions: Vapors are very corrosive and irritating to the eyes. Symptoms include pain, redness and blurred vision. Splashes can cause permanent tissue destruction.

Numerical Measures of Toxicity: Cancer Lists: NTP Carcinogen

Ingredient	Known	Anticipated	IARC Category
Hydrogen Peroxide (7722-84-1)	No	No	3
Water (7732-18-5)	No	No	None

Acute Toxicity:

Skin:	**LD50 Dermal – rat – 4060 mg/kg**
Eyes:	**Not Available**
Respiratory:	**LC50 Vapor – rat – 2000 mg/m – 4 hours**
Ingestion:	**LD50 Oral – mouse – 2000 mg/kg**

12. Ecological information

Ecotoxicity:	**Toxic to aquatic life.**
EC50 Algae:	**2.5 mg/l 72 hrs**
EC50 Daphnia:	**2.4 mg/l 48 hrs**
LC50 Fish:	**16.4 mg/l 96 hrs**
Persistence and Degradability:	**Expected to be readily biodegradable.**
Bioaccumulative Potential:	**No bioaccumulation expected.**
Mobility in Soil:	**This material is a mobile liquid.**
Other adverse effects:	**No information found.**

13. Disposal considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transportation Information

US DOT:	**Not Dangerous Goods**
TDG:	**Not Dangerous Goods**
IMDG:	**Not Dangerous Goods**
Marine Pollutant:	**No**
IATA/ICAO:	**Not Dangerous Goods**

15. Regulatory information

TSCA Inventory Status:	**All ingredients are listed on the TSCA inventory.**
DSCL (EEC):	**All ingredients are listed on the DSCL inventory.**
California Proposition 65:	**Not Listed.**
SARA 302 Listed:	**Hydrogen Peroxide (CAS 7722-84-1)**
SARA 304 Listed:	**Hydrogen Peroxide (CAS 7722-84-1)**
SARA 311	**Hydrogen Peroxide (CAS 7722-84-1)**
SARA 312	**Hydrogen Peroxide (CAS 7722-84-1)**
SARA 313 Listed:	**Hydrogen Peroxide (CAS 7722-84-1)**
WHMIS Canada Class C:	**Oxidizing Material**
Class D-2B:	**Toxic Material Causing Other Toxic Effects**

16. Other information

Disclaimer - The information in the sheet was written based on the best knowledge and experience currently available. 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.

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