

# Safety Data Sheet

## Hydrogen Peroxide, 3%

**CAROLINA**<sup>®</sup>  
www.carolina.com

### Section 1 Product Description

**Product Name:** Hydrogen Peroxide, 3%  
**Recommended Use:** Science education applications  
**Synonyms:** Hydrogen Peroxide Solution  
**Distributor:** Carolina Biological Supply Company  
2700 York Road, Burlington, NC 27215  
1-800-227-1150  
**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F)  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**DANGER**



Causes skin irritation. Causes serious eye damage.

**GHS Classification:**

Serious Eye Damage/Eye Irritation Category 1, Skin Corrosion/Irritation Category 2

### Section 3 Composition / Information on Ingredients

| <u>Chemical Name</u> | <u>CAS #</u> | <u>%</u> |
|----------------------|--------------|----------|
| Water                | 7732-18-5    | 97       |
| Hydrogen Peroxide    | 7722-84-1    | 3        |

### Section 4 First Aid Measures

**Emergency and First Aid Procedures**

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.  
**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**Skin Contact:** IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.  
**Ingestion:** If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

### Section 5 Firefighting Procedures

**Extinguishing Media:** Use media suitable to extinguish surrounding fire.  
**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.  
**Fire and/or Explosion Hazards:** N/A  
**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide

### Section 6 Spill or Leak Procedures

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## Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

## Section 7 Handling and Storage

**Handling:** Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/vapor. Do not get in eyes, on skin, or on clothing. Retained residue may make empty containers hazardous; use caution.

**Storage:** Suitable for any general chemical storage.  
Avoid direct sunlight and heat.

**Storage Code:** Green - general chemical storage

## Section 8 Protection Information

| <u>Chemical Name</u> | <u>ACGIH</u> | <u>OSHA PEL</u> |                          |        |
|----------------------|--------------|-----------------|--------------------------|--------|
|                      | (TWA)        | (STEL)          | (TWA)                    | (STEL) |
| Hydrogen Peroxide    | 1 ppm TWA    | N/A             | 1 ppm TWA; 1.4 mg/m3 TWA | N/A    |

### Control Parameters

#### Engineering Measures:

Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

#### Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

#### Respiratory Protection:

No respiratory protection required under normal conditions of use.

#### Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

#### Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

#### Gloves:

Neoprene, Nitrile

## Section 9 Physical Data

|                                          |                                                     |
|------------------------------------------|-----------------------------------------------------|
| <b>Formula:</b> H2O2 (aq)                | <b>Vapor Pressure:</b> N/A                          |
| <b>Molecular Weight:</b> 34.01 g/mol     | <b>Evaporation Rate (BuAc=1):</b> N/A               |
| <b>Appearance:</b> Colorless Liquid      | <b>Vapor Density (Air=1):</b> 1.2 (air = 1)         |
| <b>Odor:</b> None                        | <b>Specific Gravity:</b> 1.01                       |
| <b>Odor Threshold:</b> No data available | <b>Solubility in Water:</b> Soluble                 |
| <b>pH:</b> 6.0-8.0                       | <b>Log Pow (calculated):</b> No data available      |
| <b>Melting Point:</b> No data available  | <b>Autoignition Temperature:</b> No data available  |
| <b>Boiling Point:</b> 100 C              | <b>Decomposition Temperature:</b> No data available |
| <b>Flash Point:</b> No data available    | <b>Viscosity:</b> No data available                 |
| <b>Flammable Limits in Air:</b> N/A      | <b>Percent Volatile by Volume:</b> 100%             |

## Section 10 Reactivity Data

|                                  |                                             |
|----------------------------------|---------------------------------------------|
| <b>Reactivity:</b>               | No data available                           |
| <b>Chemical Stability:</b>       | Stable under normal conditions.             |
| <b>Conditions to Avoid:</b>      | None known.                                 |
| <b>Incompatible Materials:</b>   | Water-reactive materials, Metals (powdered) |
| <b>Hazardous Polymerization:</b> | Will not occur                              |

## Section 11 Toxicity Data

**Routes of Entry** Inhalation, ingestion, eye or skin contact.

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**Symptoms (Acute):** Eye Irritation, Respiratory Irritation  
**Delayed Effects:** No data available

## Acute Toxicity:

| Chemical Name     | CAS Number | Oral LD50                                                | Dermal LD50                   | Inhalation LC50                   |
|-------------------|------------|----------------------------------------------------------|-------------------------------|-----------------------------------|
| Water             | 7732-18-5  | Oral LD50 Rat<br>90000 mg/kg                             |                               |                                   |
| Hydrogen Peroxide | 7722-84-1  | Oral LD50 Rat 910<br>mg/kg<br>Oral LD50 Rat 376<br>mg/kg | Dermal LD50 Rat<br>4060 mg/kg | INHALATION<br>LC50 Rat 2<br>GM/M3 |

## Carcinogenicity:

| Chemical Name     | CAS Number | IARC       | NTP        | OSHA       |
|-------------------|------------|------------|------------|------------|
| No data available |            | Not listed | Not listed | Not listed |

## Chronic Effects:

|                              |                                                     |
|------------------------------|-----------------------------------------------------|
| <b>Mutagenicity:</b>         | No evidence of a mutagenic effect.                  |
| <b>Teratogenicity:</b>       | No evidence of a teratogenic effect (birth defect). |
| <b>Sensitization:</b>        | No evidence of a sensitization effect.              |
| <b>Reproductive:</b>         | No evidence of negative reproductive effects.       |
| <b>Target Organ Effects:</b> |                                                     |
| <b>Acute:</b>                | Skin, Eyes                                          |
| <b>Chronic:</b>              | No data available                                   |

## Section 12

## Ecological Data

|                               |                                                             |
|-------------------------------|-------------------------------------------------------------|
| <b>Overview:</b>              | This material is not expected to be harmful to the ecology. |
| <b>Mobility:</b>              | No data                                                     |
| <b>Persistence:</b>           | No data                                                     |
| <b>Bioaccumulation:</b>       | No data                                                     |
| <b>Degradability:</b>         | No data                                                     |
| <b>Other Adverse Effects:</b> | No data                                                     |

| Chemical Name     | CAS Number | Eco Toxicity                                                                                                            |
|-------------------|------------|-------------------------------------------------------------------------------------------------------------------------|
| Water             | 7732-18-5  | No data available                                                                                                       |
| Hydrogen Peroxide | 7722-84-1  | 96 HR LC50 PIMEPHALES PROMELAS 16.4 MG/L<br>24 HR EC50 DAPHNIA MAGNA 7.7 MG/L<br>72 HR EC50 CHLORELLA VULGARIS 2.5 MG/L |

## Section 13

## Disposal Information

|                                |                                                                                                                                                       |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disposal Methods:</b>       | Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance. |
| <b>Waste Disposal Code(s):</b> | This material is not considered to be a RCRA hazardous waste.                                                                                         |

## Section 14

## Transport Information

|                                           |                                          |
|-------------------------------------------|------------------------------------------|
| <b>Ground - DOT Proper Shipping Name:</b> | <b>Air - IATA Proper Shipping Name:</b>  |
| Not regulated for transport by DOT        | Not regulated for air transport by IATA. |

## Section 15

## Regulatory Information

| <b>TSCA Status:</b> | All components in this product are on the TSCA Inventory. |            |          |           |                                  |               |
|---------------------|-----------------------------------------------------------|------------|----------|-----------|----------------------------------|---------------|
| Chemical Name       | CAS Number                                                | § 313 Name | § 304 RQ | CERCLA RQ | § 302 TPQ                        | CAA 112(2) TQ |
| Hydrogen Peroxide   | 7722-84-1                                                 | No         | No       | No        | 1000 lb TPQ (concentration >52%) | No            |

## Section 16

## Additional Information

Hydrogen Peroxide, 3%

# Safety Data Sheet

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The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

## Glossary

|        |                                                                       |      |                                               |
|--------|-----------------------------------------------------------------------|------|-----------------------------------------------|
| ACGIH  | American Conference of Governmental Industrial Hygienists             | NTP  | National Toxicology Program                   |
| CAS    | Chemical Abstract Service Number                                      | OSHA | Occupational Safety and Health Administration |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act | PEL  | Permissible Exposure Limit                    |
| DOT    | U.S. Department of Transportation                                     | ppm  | Parts per million                             |
| IARC   | International Agency for Research on Cancer                           | RCRA | Resource Conservation and Recovery Act        |
| N/A    | Not Available                                                         | SARA | Superfund Amendments and Reauthorization Act  |
|        |                                                                       | TLV  | Threshold Limit Value                         |
|        |                                                                       | TSCA | Toxic Substances Control Act                  |
|        |                                                                       | IDLH | Immediately dangerous to life and health      |