

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION of the SUBSTANCE or PREPARATION

Trade/Material Name: Water
Chemical Names, Common Names: Water
Product Use: Various
Molecular Formula: H₂O
Product Catalog Numbers: 111-04A/C-TOC, 112-01A/CTOC, 112-01A/C6-TOC
COMPANY/UNDERTAKING IDENTIFICATION:
U.S. Manufacturer's Name: EP Scientific Products, LLC.-ThermoFisher Scientific
Address: 520 N. Main Street
Miami, OK 74354
1-(800)-331-7425
Business Phone:
Emergency Phone: CHEMTREC: 1-800-424-9300 (U.S./Canada/Puerto Rico) [24-hours]
CHEMTREC: +1-703-527-3887 (Outside North America) [24-hours]

EMAIL ADDRESS FOR PRODUCT INFORMATION:

ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2004 format. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. The product is also classified per all applicable EU Directives through EC 1907: 2006, the European Union CLP EC 1272/2008 and the Global Harmonization Standard.

2. HAZARD IDENTIFICATION

GLOBAL HARMONIZATION CLASSIFICATION: This product has been classified in accordance with the Global Harmonization Standard.

Classification: Not Applicable

Hazard Statement Codes: Not Applicable

See Section 15 for full text of Precautionary Statements and Hazard Statement Codes

EU LABELING AND CLASSIFICATION 67/548/EEC: This product meets the definition of hazardous, as defined by the European Community Council Directive 67/548/EEC or subsequent Directives.

Classification: Not Applicable Risk Phrases: Not Applicable Safety Phrases: Not Applicable

See Section 15 for full text of Ingredient Risk and Safety Phrases

EMERGENCY OVERVIEW: Product Description: This product is a clear, colorless, odorless liquid. **Health Hazards:** This product is purified water and presents no health hazards when handled alone. Although water has an LD₅₀ (Oral-Rat) value (see Section 11), this product poses no health hazard under normal use and handling. In use with other chemical materials, the hazards of those materials may be relevant. **Flammability Hazards:** This product is not flammable or combustible. If involved in a fire, no hazardous by-products are generated. **Reactivity Hazards:** This product is not reactive. **Environmental Hazards:** This product will not cause harm in the environment by itself. **Emergency Considerations:** Emergency responders should wear appropriate protection for situation to which they respond.

3. COMPOSITION and INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS #	EINECS#	WT%	EU Hazard Symbol (67/548/EEC)	GHS/EU Hazard Symbol (1272/2008 EC)	EU Classification (67/548/EEC) GHS & EU Classification (1272/2008 EC) Risk Phrases/Hazard Statements
Water	7732-18-5	231-791-2	100%	Not Applicable	Not Applicable	EU 67/548 Hazard Classification: Not Applicable GHS & EU 1272/2008 Classification: Not Applicable

See Section 15 for full text of Ingredient Risk Phrases and Precautionary Statements

4. FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURES: Take a copy of label and MSDS to physician or health professional with the contaminated individual.

IMMEDIATE MEDICAL ATTENTION NEEDED: No.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Not applicable.

RECOMMENDATIONS TO PHYSICIANS: Not applicable.

5. FIRE-FIGHTING MEASURES

FLASH POINT: Not applicable.

AUTOIGNITION TEMPERATURE: Not applicable.

FLAMMABLE LIMITS (in air by volume, %): Not applicable.

FIRE EXTINGUISHING MEDIA: Use extinguishing media appropriate for surrounding fire.

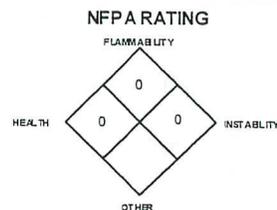
UNSUITABLE EXTINGUISHING MEDIA: None known.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None.

Explosion Sensitivity to Mechanical Impact: Not Sensitive.

Explosion Sensitivity to Static Discharge: Not Sensitive.

ADVICE TO FIRE-FIGHTERS: None.



Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate
3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: This product does not pose any serious hazard if released. If floors are wet, a slip hazard may exist.

PROTECTIVE EQUIPMENT: For spills only containing this product, wear lightweight nitrile or other type glove.

METHODS FOR CLEAN-UP AND CONTAINMENT: Absorb spilled material with polypads or other type material.

ENVIRONMENTAL PRECAUTIONS: This product does not pose an hazard to the environment.

REFERENCE TO OTHER SECTIONS: See Section 13, Disposal Considerations for more information.

7. HANDLING and USE

PRECAUTIONS FOR SAFE HANDLING: Avoid contact with other hazardous materials. Although this product is non-hazardous, handling of all materials in the workplace should be done with care.

CONDITIONS FOR SAFE STORAGE: Store in sealed containers. Store away from water-reactive materials.

SPECIFIC END USE(S): This product has various uses in different industries. Follow all industry standards for use of this product.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Follow practices indicated in Section 6 (Accidental Release Measures). Make certain that application equipment is locked and tagged-out safely, if necessary.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

VENTILATION AND ENGINEERING CONTROLS: No special ventilation or engineering controls are associated with routine use of this liquid.

EXPOSURE LIMITS/CONTROL PARAMETERS:

CHEMICAL NAME	CAS #	EXPOSURE LIMITS IN AIR							
		ACGIH-TLVs		OSHA-PELs		NIOSH-RELS		NIOSH	OTHER
		TWA mg/m ³	STEL mg/m ³	TWA mg/m ³	STEL mg/m ³	TWA mg/m ³	STEL mg/m ³	IDLH mg/m ³	mg/m ³
Water	7732-18-5	NE	NE	NE	NE	NE	NE	NE	NE

NE = Not Established.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132), equivalent standards of Canada (including CSA Standard Z94.4-02 and CSA Standard Z94.3-07), or standards of EU member states (including EN 529:2005 for respiratory PPE, CEN/TR 15419:2006 for hand protection, and CR 13464:1999 for face/eye protection. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: None needed under normal conditions of use and handling. If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134) and equivalent U.S. State standards, Canadian CSA Standard Z94.4-93 and the European Standard EN 529:2005 and Respiratory Protection Standards of EU member states. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under U.S. Federal OSHA's Respiratory Protection Standard (1910.134-1998).

EYE PROTECTION: None needed under conditions of use and handling. If other chemical materials are present, splash goggles or safety glasses should be worn. If necessary, refer to U.S. OSHA 29 CFR 1910.133, the Canadian CSA Standard Z94.3-M1982, *Industrial Eye and Face Protectors*, or the European Standard CR 13464:1999 for further information.

HAND PROTECTION: None needed under normal conditions of use and handling. In presence of other chemicals, wear butyl rubber gloves for routine industrial use. Use triple gloves for spill response. If necessary, refer to U.S. OSHA 29 CFR 1910.138, appropriate Standards of Canada, or the European Standard CEN/TR 15419:2006.

BODY/SKIN PROTECTION: None needed under normal conditions of use and handling. Use body protection appropriate for task (e.g., lab coat, coveralls, Tyvek suit). If necessary, refer to OSHA Technical Manual (Section VII: Personal Protective Equipment), or refer to appropriate Standards of Canada, or the European Standard CEN/TR 15419:2006, for further information. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136 and the Canadian CSA Standard Z195-02, *Protective Footwear*.

9. PHYSICAL and CHEMICAL PROPERTIES

BOILING POINT: 100°C (212°F)

EVAPORATION RATE (water = 1): 1.0

VAPOR PRESSURE (air = 1): 17.5 mmHg

PERCENT VOLATILE: 100%

MOLECULAR WEIGHT: 18.0

COEFFICIENT WATER/OIL DISTRIBUTION: Not applicable.

APPEARANCE AND COLOR: This product is a clear, colorless, odorless liquid.

HOW TO DETECT THIS SUBSTANCE (identification properties): There are no good identification properties.

FREEZING/MELTING POINT: 0°C (32°F)

SOLUBILITY IN WATER: Not applicable.

SPECIFIC GRAVITY/DENSITY: 1.0

BULK DENSITY: 8.337 lbs/gal (62.3 lb/cu ft)

ODOR THRESHOLD: Not applicable; odorless.

pH: 7.0

10. STABILITY and REACTIVITY

REACTIVITY: Not reactive.

CHEMICAL STABILITY: This product is stable.

DECOMPOSITION PRODUCTS: Combustion: If exposed to extremely high temperatures, water will boil and form steam. Hydrolysis: None.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: This product is incompatible with strong acids, strong reducing agents, acid chlorides, phosphorous trichloride, phosphorous pentachloride, phosphorous oxychloride and other materials which are water reactive.

POSSIBILITY OF HAZARDOUS REACTIONS OR POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Avoid extreme temperatures and contact with incompatible chemicals.

11. TOXICOLOGICAL INFORMATION

SYMPTOMS OF OVER-EXPOSURE BY ROUTE OF EXPOSURE:

This product should not pose any hazard through normal routes of exposure in an occupational setting.

INHALATION: This product does not pose a hazard by inhalation.

CONTACT WITH SKIN or EYES: This product does not pose a hazard by contact with the skin or eyes.

SKIN ABSORPTION: Skin absorption is not a potentially route of exposure for this product.

INGESTION: Ingestion is not anticipated to be a likely route of occupational exposure. Ingestion of copious amounts of water can cause electrolyte imbalance and can be fatal in extreme cases.

HEALTH EFFECTS OR RISKS FROM EXPOSURE: An Explanation in Lay Terms. Over-exposure to this product is not expected to cause either acute or chronic health effects.

ACUTE: Not applicable.

CHRONIC: Not applicable.

TARGET ORGANS: ACUTE: None. CHRONIC: None.

TOXICITY DATA: The following toxicological data are available for water.

WATER:

LDLo (Rectal-Woman) 180 gm/kg/28 hours: Sense Organs and Special Senses (Eye): mydriasis (pupillary dilation); Behavioral: convulsions or effect on seizure threshold; Gastrointestinal: nausea or vomiting

TDLo (Oral-Infant) 333 gm/kg: Behavioral: convulsions or effect on seizure threshold; Gastrointestinal: hypermotility, diarrhea; Nutritional and Gross Metabolic: body temperature increase

TDLo (Oral-Man) 42.86 gm/kg: Behavioral: tremor, muscle contraction or spasticity

LD₅₀ (Oral-Rat) > 90 mL/kg

LD₅₀ (Intraperitoneal-Mouse) 190 gm/kg

LD₅₀ (Intravenous-Mouse) 25 gm/kg

WATER (continued):

LDLo (Oral-Dog) 629 gm/kg

LDLo (Oral-Cat) 320 gm/kg: Behavioral: convulsions or effect on seizure threshold

LDLo (Oral-Rabbit) 368 gm/kg: Behavioral: convulsions or effect on seizure threshold

LDLo (Oral-Guinea Pig) 429 gm/kg: Behavioral: convulsions or effect on seizure threshold

LDLo (Rectal-Rabbit) 450 gm/kg: Sense Organs and Special Senses (Eye): mydriasis (pupillary dilation); Behavioral: muscle contraction or spasticity; Gastrointestinal: changes in structure or function of salivary glands

LDLo (Intravenous-Rabbit) 13 gm/kg: Blood: other hemolysis with or without anemia

TDLo (Oral-Rabbit) 3502 gm/kg/2 weeks-intermittent: Behavioral: convulsions or effect on seizure threshold, muscle weakness; Related to Chronic Data: death

CARCINOGENIC POTENTIAL: Water is not found on the following lists: U.S. EPA, U.S. NTP, U.S. OSHA, U.S. NIOSH, GERMAN MAK, IARC, or ACGIH and therefore is neither considered to be nor suspected to be cancer-causing agents by these agencies.

IRRITANCY OF PRODUCT: This product is not irritating.

SENSITIZATION OF PRODUCT: Water is not a human skin or respiratory sensitizer.

REPRODUCTIVE TOXICITY INFORMATION: Listed below is information concerning the effects Water on the human reproductive system.

Mutagenicity: Water does not cause mutagenic effects in humans.

Embryotoxicity: Water does not cause embryotoxic effects in humans.

Teratogenicity: Water does not cause teratogenic effects in humans.

Reproductive Toxicity: Water does not cause adverse reproductive effects in humans.

A mutagen is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generation lines. An embryotoxin is a chemical which causes damage to a developing embryo (i.e. within the first eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A teratogen is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A reproductive toxin is any substance which interferes in any way with the reproductive process.

BIOLOGICAL EXPOSURE INDICES (BEIs): Not applicable.

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

HEALTH HAZARD	(BLUE)	0
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FLAMMABILITY HAZARD	(RED)	0
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PHYSICAL HAZARD	(YELLOW)	0
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PROTECTIVE EQUIPMENT

EYES	RESPIRATORY	HANDS	BODY
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SEE SECTION 8

For Routine Industrial Use and Handling Applications

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate
3 = Serious 4 = Severe * = Chronic hazard

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

MOBILITY IN SOIL: Water is completely mobile in soil.

PERSISTENCE AND BIODEGRADABILITY: Water poses no threat of persistence and does not biodegrade.

BIO-ACCUMULATION POTENTIAL: Water has no bio-accumulation potential.

ECOTOXICITY: Water does not pose and hazard to plants and animals in the aquatic environment.

OTHER ADVERSE EFFECTS: Water does not have any ozone depletion potential.

ENVIRONMENTAL EXPOSURE CONTROLS: Not applicable.

13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT/DISPOSAL METHODS: It is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste per regulations of the area in which the waste is generated and/or disposed of. Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This liquid, if unaltered by use, may be disposed of as advised by your local wastewater regulatory authority.

DISPOSAL CONTAINERS: Waste materials must be placed in and shipped in appropriate 5-gallon or 55-gallon poly or metal waste pails or drums. Permeable cardboard containers are not appropriate and should not be used. Ensure that any required marking or labeling of the containers be done to all applicable regulations.

PRECAUTIONS TO BE FOLLOWED DURING WASTE HANDLING: Wear proper protective equipment when handling waste materials.

EPA WASTE NUMBER: Not applicable.

EUROPEAN WASTE CODES: Not applicable.

14. TRANSPORTATION INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION REGULATIONS: This product is not classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This product is not classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is not classified as dangerous goods, per the International Air Transport Association.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is not classified as dangerous goods, per the International Maritime Organization.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is not classified by the Economic Commission for Europe to be dangerous goods.

15. REGULATORY INFORMATION

ADDITIONAL UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: Water is NOT subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA THRESHOLD PLANNING QUANTITY: Not applicable.

U.S. CERCLA REPORTABLE QUANTITY (RQ): Not applicable.

U.S. TSCA INVENTORY STATUS: Water is excepted from being listed on the TSCA Inventory.

OTHER U.S. FEDERAL REGULATIONS: Not applicable.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): The components of this product are not on the California Proposition 65 Lists.

U.S. ANSI STANDARD LABELING (Precautionary Statements): Although this product does not pose any specific health hazards by any route of exposure, do not taste or swallow. Do not get on skin or in eyes. Avoid breathing vapors or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Wear appropriate personal protective equipment as necessary for task. **FIRST-AID:** In case of any adverse effect, contact appropriate first-aid personnel. **IN CASE OF FIRE:** Use fire extinguishing agents appropriate for surrounding materials. **IN CASE OF SPILL:** Absorb spill with inert material. Place residue in suitable container. Consult Material Safety Data Sheet for additional information.

ADDITIONAL CANADIAN REGULATIONS:

CANADIAN DSL/NDSL STATUS: Water is excepted from listing on DSL or NDSL Inventories.

OTHER CANADIAN REGULATIONS: Not applicable.

CANADIAN ENVIRONMENTAL PROTECTION AGENCY (CEPA) PRIORITIES SUBSTANCES LIST: Not applicable.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: Not applicable.

15. REGULATORY INFORMATION (Continued)

GLOBAL HARMONIZATION CLASSIFICATION: This product has been classified in accordance with the Global Harmonization Standard.

Classification: Not applicable.

Signal Word: Not applicable.

Hazard Statements: Not applicable.

Precautionary Statements: Not applicable.

Hazard Symbols: Not applicable.

ADDITIONAL EUROPEAN REGULATIONS:

EU LABELING AND CLASSIFICATION: The product has been classified as per European Community Council Directives, as follows.

Classification: Not applicable.

Risk Phrases: Not applicable.

Safety Phrases: Not applicable.

Hazard Symbol: Not applicable.

16. OTHER INFORMATION

PREPARED BY:

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