

The following list contains the Material Safety Data Sheets you requested. Please scroll down to view the requested MSDS(s).

<u>Product</u>	<u>MSDS</u>	<u>Distributor</u>	<u>Format</u>	<u>Language</u>	<u>Quantity</u>
2329332	N/A	Hach Company	OSHA	English	1

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Total Enclosures: 1

World Headquarters  
Hach Company  
P.O.Box 389  
Loveland, CO USA 80539  
(970) 669-3050

MSDS No: M00385

# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Wide Range 4 pH Indicator Solution  
**Catalog Number:** 2329332

Hach Company  
P.O.Box 389  
Loveland, CO USA 80539  
(970) 669-3050

Emergency Telephone Numbers:  
(Medical and Transportation)  
(303) 623-5716 24 Hour Service  
(515)232-2533 8am - 4pm CST

**MSDS Number:** M00385  
**Chemical Name:** Not applicable  
**CAS No.:** Not applicable  
**Chemical Formula:** Not applicable  
**Chemical Family:** Not applicable  
**Hazard:** Flammable. Causes irritation.  
**Date of MSDS Preparation:**  
**Day:** 01  
**Month:** April  
**Year:** 2012

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

### Demineralized Water

**CAS No.:** 7732-18-5  
**TSCA CAS Number:** 7732-18-5  
**Percent Range:** 45.0 - 55.0  
**Percent Range Units:** volume / volume  
**LD50:** None reported  
**LC50:** None reported  
**TLV:** Not established  
**PEL:** Not established  
**Hazard:** No effects anticipated.

### Other components, each

**CAS No.:** Not applicable  
**TSCA CAS Number:** Not applicable  
**Percent Range:** < 0.1  
**Percent Range Units:** volume / volume  
**LD50:** Not applicable  
**LC50:** Not applicable  
**TLV:** Not established  
**PEL:** Not established  
**Hazard:** Any ingredient(s) of this product listed as "Other component(s)" is not considered a health hazard to the user of this product.

### Isopropanol

**CAS No.:** 67-63-0  
**TSCA CAS Number:** 67-63-0  
**Percent Range:** 45.0 - 55.0  
**Percent Range Units:** volume / volume  
**LD50:** Oral rat LD50 = 5045 mg/kg Oral Human LDLo = 2770 mg/kg  
**LC50:** Inhalation rat LCLo = 12000 ppm/8hr

**TLV:** 400 ppm (500 ppm STEL)  
**PEL:** 400 ppm  
**Hazard:** Flammable. Causes moderate eye irritation.

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### 3. HAZARDS IDENTIFICATION

**Emergency Overview:**

**Appearance:** Dark green liquid

**Odor:** Alcoholic

MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION  
FLAMMABLE LIQUID AND VAPOR

**HMIS:**

**Health:** 1

**Flammability:** 4

**Reactivity:** 0

**Protective Equipment:** X - See protective equipment, Section 8.

**NFPA:**

**Health:** 1

**Flammability:** 3

**Reactivity:** 0

**Symbol:** Not applicable

**Potential Health Effects:**

**Eye Contact:** Causes moderate irritation

**Skin Contact:** May cause irritation

**Skin Absorption:** No effects anticipated

**Target Organs:** Not applicable

**Ingestion:** May cause: drowsiness dizziness incoordination giddiness depression headache abdominal pain nausea vomiting diarrhea blood pressure changes rapid pulse and respirations respiratory arrest coma death

**Target Organs:** Central nervous system

**Inhalation:** May cause: respiratory tract irritation Effects similar to those of ingestion.

**Target Organs:** Central nervous system

**Medical Conditions Aggravated:** Pre-existing: Eye conditions Skin conditions Respiratory conditions

**Chronic Effects:** No effects anticipated

**Cancer / Reproductive Toxicity Information:**

This product does NOT contain any OSHA listed carcinogens.

This product does NOT contain any IARC listed chemicals.

This product does NOT contain any NTP listed chemicals.

**Additional Cancer / Reproductive Toxicity Information:** Contains: an experimental teratogen.

**Toxicologically Synergistic Products:** None reported

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### 4. FIRST AID

**Eye Contact:** Immediately flush eyes with water for 15 minutes. Call physician.

**Skin Contact (First Aid):** Wash skin with plenty of water. Call physician if irritation develops.

**Ingestion (First Aid):** Give large quantities of water. Call physician immediately.

**Inhalation:** Remove to fresh air.

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### 5. FIRE FIGHTING MEASURES

**Flammable Properties:** Flammable Liquid

**Flash Point:** 21°C; 70°F

**Method:** Closed cup

**Flammability Limits:**

**Lower Explosion Limits:** Not available

**Upper Explosion Limits:** Not available

**Autoignition Temperature:** Not available

**Hazardous Combustion Products:** Toxic fumes of: carbon monoxide, carbon dioxide.

**Fire / Explosion Hazards:** Flammable Liquid Do not expose to sparks or other ignition sources. May react violently with: strong oxidizers

**Static Discharge:** None reported.

**Mechanical Impact:** None reported  
**Extinguishing Media:** Water. Dry chemical. Alcohol foam. Carbon dioxide  
**Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear. Containers can build up pressure if exposed to heat.

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## 6. ACCIDENTAL RELEASE MEASURES

**Spill Response Notice:**

Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.

**Containment Technique:** Remove all combustible material from spill area. Remove all ignition and spark-creating sources from the spill area. Cover spilled liquid with a commercially available flammable liquid sorbent such as vapor barrier blanket or activated carbon to avoid evolution of fumes. Vapors may travel to a source of ignition and flash back. May be ignited by: heat, sparks, or flames. Dike the material to create a barrier to combustibles.

**Clean-up Technique:** Eliminate all sources of ignition. Do not breathe the fumes. Cover with an inert material, such as sand. Use only non-sparking tools. Sweep up material. Incinerate material at a government approved hazardous waste facility. Decontaminate the area of the spill with a soap solution.

**Evacuation Procedure:** Evacuate general area (50 foot radius or as directed by your facility's emergency response plan) when: any quantity is spilled. If conditions warrant, increase the size of the evacuation.

**Special Instructions (for accidental release):** Product is regulated as RCRA hazardous waste in the U.S.

**304 EHS RQ (40 CFR 355):** Not applicable

**D.O.T. Emergency Response Guide Number:** 129

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## 7. HANDLING / STORAGE

**Handling:** Avoid contact with eyes skin clothing Do not breathe mist or vapors. Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.

**Storage:** Store away from: oxidizers sparks, flames and other ignition sources Protect from: heat Store between 10° and 25°C.

**Flammability Class:** Class IB

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## 8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

**Engineering Controls:** Maintain general industrial hygiene practices when using this product. Maintain adequate ventilation to keep vapor level below TWA for chemicals in this product.

**Personal Protective Equipment:**

**Eye Protection:** chemical splash goggles

**Skin Protection:** disposable latex gloves In the EU, the selected gloves must satisfy the specifications of EU Directive 89/686/EEC and standard EN 374 derived from it. lab coat

**Inhalation Protection:** adequate ventilation

**Precautionary Measures:** Avoid contact with: eyes skin clothing Do not breathe: mist/vapor Wash thoroughly after handling. Protect from: heat sparks, flames and other ignition sources Keep away from: oxidizers

**TLV:** Not established

**PEL:** Not established

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## 9. PHYSICAL / CHEMICAL PROPERTIES

**Appearance:** Dark green liquid

**Physical State:** Liquid

**Molecular Weight:** Not applicable

**Odor:** Alcoholic

**pH:** 8.7

**Vapor Pressure:** Not available

**Vapor Density (air = 1):** Not available

**Boiling Point:** 79°C; 174°F

**Melting Point:** -26°C; -15°F

**Specific Gravity/ Relative Density (water = 1; air =1):** 0.922

**Evaporation Rate (water = 1):** 5.45

**Volatile Organic Compounds Content:** Not available  
**Partition Coefficient (n-octanol / water):** Not applicable

**Solubility:**

**Water:** Miscible

**Acid:** Miscible

**Other:** Not determined

**Metal Corrosivity:**

**Steel:** 0.003 in/yr

**Aluminum:** 0.000 in/yr

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## 10. STABILITY / REACTIVITY

**Chemical Stability:** Stable when stored under proper conditions.

**Conditions to Avoid:** Contact with heat, sparks, open flames or other ignition sources. Extreme temperatures

**Reactivity / Incompatibility:** Incompatible with: oxidizers potassium-tert-butoxide cobalt chloride nitro compounds oleum

**Hazardous Decomposition:** Heating to decomposition releases toxic fumes of carbon monoxide and carbon dioxide.

**Hazardous Polymerization:** Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

**Product Toxicological Data:**

**LD50:** None reported

**LC50:** None reported

**Dermal Toxicity Data:** Isopropanol Skin rabbit LD50 = 12800 mg/kg

**Skin and Eye Irritation Data:** Isopropanol - Skin rabbit 500 mg MILD; Eye rabbit 100 mg/24 H MODERATE

**Mutation Data:** Isopropanol - Cytogenetic analysis, rat, inhalation, 1030 µg/m<sup>3</sup>/16W (intermittent)

**Reproductive Effects Data:** Isopropanol - Oral rat TDLo = 11340 mg/kg - Maternal effects - menstrual cycle changes or disorders; Oral rat TDLo 5040 mg/kg - Litter size

**Ingredient Toxicological Data:** Isopropanol Oral rat LD50 = 5045 mg/kg; Isopropanol Inhalation rat LCLo = 12000 ppm/8H

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## 12. ECOLOGICAL INFORMATION

**Product Ecological Information:** --

No ecological data available for this product. Mobility in soil: No data available

**Ingredient Ecological Information:** --

No ecological data available for the ingredients of this product.

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## 13. DISPOSAL CONSIDERATIONS

**EPA Waste ID Number:** D001

**Special Instructions (Disposal):** Incinerate material at an E.P.A. approved hazardous waste facility.

**Empty Containers:** Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.

**NOTICE (Disposal):** These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information.

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## 14. TRANSPORT INFORMATION

**D.O.T.:**

**D.O.T. Proper Shipping Name:** Isopropanol Solution

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**DOT Hazard Class:** 3

**DOT Subsidiary Risk:** NA

**DOT ID Number:** UN1219

**DOT Packing Group:** II

**I.C.A.O.:**

**I.C.A.O. Proper Shipping Name:** Isopropanol Solution

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**ICAO Hazard Class:** 3

**ICAO Subsidiary Risk:** NA

**ICAO ID Number:** UN1219

**ICAO Packing Group:** II

**I.M.O.:**

**I.M.O. Proper Shipping Name:** Isopropanol Solution

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**I.M.O. Hazard Class:** 3

**I.M.O. Subsidiary Risk:** NA

**I.M.O. ID Number:** UN1219

**I.M.O. Packing Group:** II

**Additional Information:** There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

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## 15. REGULATORY INFORMATION

**U.S. Federal Regulations:**

**O.S.H.A.:** This product meets the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)

**E.P.A.:**

**S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370):** Immediate (Acute) Health Hazard Fire Hazard

**S.A.R.A. Title III Section 313 (40 CFR 372):** This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.

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**302 (EHS) TPQ (40 CFR 355):** Not applicable

**304 CERCLA RQ (40 CFR 302.4):** Not applicable

**304 EHS RQ (40 CFR 355):** Not applicable

**Clean Water Act (40 CFR 116.4):** Not applicable

**RCRA:** Contains RCRA regulated substances. See Section 13, EPA Waste ID Number.

**C.P.S.C.:** Not applicable

**State Regulations:**

**California Prop. 65:** No Prop. 65 listed chemicals are present in this product.

**Identification of Prop. 65 Ingredient(s):** None

**California Perchlorate Rule CCR Title 22 Chap 33:** Not applicable

**Trade Secret Registry:** Not applicable

**National Inventories:**

**U.S. Inventory Status:** All ingredients in this product are listed on the TSCA 8(b) Inventory (40 CFR 710).

**TSCA CAS Number:** Not applicable

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## 16. OTHER INFORMATION

**Intended Use:** Laboratory Reagent Indicator for pH

**References:** 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor). Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. CCINFO RTECS. Canadian Centre for Occupational Health and Safety. Hamilton, Ontario Canada: 30 June 1993. Gosselin, R. E. et al. Clinical Toxicology of Commercial Products, 5th Ed. Baltimore: The Williams and Wilkins Co., 1984. List of Dangerous Substances Classified in Annex I of the EEC Directive (67/548) - Classification, Packaging and Labeling of Dangerous Substances, Amended July 1992. Vendor Information. Fire Protection Guide on Hazardous Materials, 10th Ed. Quincy, MA: National Fire Protection Fire Protection Guide on Hazardous Materials, 10th Ed. Quincy, MA: National Fire Protection Association, 1991. In-house information.

**Revision Summary:** Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS (ST/SG/AC.10/36/Add.3).

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**Legend:**

NA - Not Applicable

ND - Not Determined

NV - Not Available

w/w - weight/weight

w/v - weight/volume

v/v - volume/volume

**USER RESPONSIBILITY:** Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

**THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.**

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