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

<table>
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<tr>
<th>Product</th>
<th>MSDS</th>
<th>Distributor</th>
<th>Format</th>
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<tr>
<td>2657512</td>
<td>N/A</td>
<td>Hach Company</td>
<td>ROWGHS</td>
<td>English</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Enclosures: 1
SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Phenol Red
Catalog Number: 2657512

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

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

MSDS Number: M00349
Chemical Name: Not applicable
CAS Number: Not applicable
Additional CAS No. (for hydrated forms): Not applicable
Chemical Formula: Not applicable
Chemical Family: Not determined
Intended Use: Laboratory Reagent Indicator for pH

2. HAZARDS IDENTIFICATION

GHS Classification:
Hazard categories: Not applicable
GHS Label Elements: Not applicable

Hazard statements: Not applicable
Precautionary statements: Not applicable

HMIS:
Health: 0
Flammability: 0
Reactivity: 0
Protective Equipment: X - See protective equipment, Section 8.

NFPA:
Health: 0
Flammability: 0
Reactivity: 0
Symbol: Not applicable

WHMIS Hazard Classification: Not applicable
WHMIS Symbols: Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components according to GHS: No

Demineralized Water

CAS Number: 7732-18-5
Chemical Formula: H₂O
GHS Classification: Not a dangerous substance according to GHS.
Percent Range: 55.0 - 65.0
Percent Range Units: volume / volume
PEL: Not established
**Propylene Glycol**

**CAS Number:** 57-55-6  
**Chemical Formula:** C₃H₈O₂  
**GHS Classification:** Not a dangerous substance according to GHS.  
**Percent Range:** 30.0 - 40.0  
**Percent Range Units:** weight / volume  
**PEL:** Not established  
**TLV:** Not established  

**WHMIS Symbols:** Not applicable

**Other components, each**

- **CAS Number:** Not applicable  
- **Chemical Formula:** Not applicable.  
- **GHS Classification:** Not applicable  
- **Percent Range:** < 1.0  
- **Percent Range Units:** weight / volume  
- **PEL:** Not established  
- **TLV:** Not established  

**WHMIS Symbols:** Not applicable

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### 4. FIRST AID MEASURES

**General Information:** In the event of exposure, show this Material Safety Data Sheet and label (where possible) to a doctor.  
**Advice to doctor:** Treat symptomatically.  
**Eye Contact:** Immediately flush eyes with water for 15 minutes. Call physician if irritation develops.  
**Skin Contact (First Aid):** Remove contaminated clothing. Wash skin with soap and plenty of water. Call physician if irritation develops.  
**Inhalation:** Remove to fresh air.  
**Ingestion (First Aid):** Give large quantities of water. Never give anything by mouth to an unconscious person. Call physician immediately.

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### 5. FIRE FIGHTING MEASURES

**Flammable Properties:** Can burn in fire, releasing toxic vapors.  
**Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.  
**Extinguishing Media:** Water. Carbon dioxide Dry chemical.  
**Extinguishing Media NOT To Be Used:** Not applicable  
**Fire / Explosion Hazards:** None reported  
**Hazardous Combustion Products:** Toxic fumes of: carbon monoxide, carbon dioxide.

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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:** Stop spilled material from being released to the environment.  
**Clean-up Technique:** Absorb spilled liquid with non-reactive sorbent material. Sweep up material. Place material in a plastic bag. Mark bag 'Non-hazardous trash', and dispose of as normal refuse. Decontaminate the area of the spill with a soap solution.  
**Evacuation Procedure:** Evacuate as needed to perform spill clean-up. If conditions warrant, increase the size of the evacuation.
7. HANDLING AND STORAGE

Handling: Avoid contact with eyes. Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.
Storage: Keep container tightly closed when not in use.
Flammability Class: Not applicable

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Maintain general industrial hygiene practices when using this product.
Personal Protective Equipment:
Eye Protection: safety glasses with top and side shields
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. Wash thoroughly after handling.
TLV: Not established
PEL: Not established
For Occupational Exposure Limits (OEL) for ingredients, see section 3 - Composition/Information on Ingredients.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, red liquid
Physical State: Liquid
Molecular Weight: Not applicable
Odor: None
Odor Threshold: Odorless
pH: Not determined
Metal Corrosivity:
Corrosivity Classification: Not classified as corrosive to metals according to GHS criteria.
Steel: Not determined
Aluminum: Not determined
Specific Gravity/Relative Density (water = 1; air = 1): Not determined
Viscosity: Not determined
Solubility:
Water: Soluble
Acid: Not determined
Other: Not determined
Partition Coefficient (n-octanol/water): Not applicable
Coefficient of Water/Oil: Not applicable
Melting Point: Not determined
Decomposition Temperature: Not determined
Boiling Point: 140°C
Vapor Pressure: Not determined
Vapor Density (air = 1): Not determined
Evaporation Rate (water = 1): Not determined
Volatile Organic Compounds Content: Not applicable
Flammable Properties: Can burn in fire, releasing toxic vapors.
Flash Point: Not applicable
Method: Not applicable
Flammability Limits:
Lower Explosion Limits: Not applicable
Upper Explosion Limits: Not applicable
Autoignition Temperature: Not determined
Explosive Properties:
Not classified according to GHS criteria.
Oxidizing Properties:
Not classified according to GHS criteria.
Reactivity Properties:
Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

Gas under Pressure: Not classified according to GHS criteria. Not determined

10. STABILITY AND REACTIVITY

Chemical Stability: Stable when stored under proper conditions. Mechanical Impact: None reported Static Discharge: None reported. Reactivity / Incompatibility: None reported Hazardous Decomposition: Toxic fumes of: carbon dioxide carbon monoxide Conditions to Avoid: Heat Evaporation

11. TOXICOLOGICAL INFORMATION

Toxicokinetics, Metabolism and Distribution: No information available for mixture. Toxicologically Synergistic Products: None reported Acute Toxicity: Based on classification principles, the classification criteria are not met. ATE (Mix) Oral LD50 = 46262 mg/Kg ATE (Mix) Dermal LD50 = 50193 mg/Kg ATE (Mix) Inhalation (vapor) LC50 = 5260.62mg/L Specific Target Organ Toxicity - Single Exposure (STOT-SE): Based on classification principles, the classification criteria are not met. Specific Target Organ Toxicity - Repeat Exposure (STOT-RE): Based on classification principles, the classification criteria are not met. Skin Corrosion/Irritation: Based on classification principles, the classification criteria are not met. Eye Damage: Based on classification principles, the classification criteria are not met. Sensitization: Based on classification principles, the classification criteria are not met. CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction): No germ cell mutagenicity, carcinogenicity or reproductive toxicity data found. This product does NOT contain any IARC listed chemicals. This product does NOT contain any NTP listed chemicals. This product does NOT contain any OSHA listed carcinogens. Symptoms/Effects:

Ingestion: Practically non-toxic. Very large doses may cause: central nervous system depression kidney damage rapid pulse and respirations convulsions Inhalation: No effects anticipated Skin Absorption: No effects anticipated Chronic Effects: None reported Medical Conditions Aggravated: None reported

12. ECOLOGICAL INFORMATION

Product Ecological Information: No information available for this product. Ingredient Ecological Information: Propylene Glycol: 96 hr Pimephales promelas LC50 = 51400 mg/L; 48 hr Daphnia magna LC50 = 34400 mg/L; 96 hr Selenastrum capricornutum EC50 = 19000 mg/L. CEPA Statement: Propylene Glycol: Not persistent, not bioaccumulative or inherently toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

EPA Waste ID Number: Not applicable Special Instructions (Disposal): Dilute to 3 to 5 times the volume with cold water. Open cold water tap completely, slowly pour the material to the drain. Allow cold water to run for 5 minutes to completely flush the system. 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. In Europe: Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.
14. TRANSPORT INFORMATION

D.O.T.:
D.O.T. Proper Shipping Name: Not Currently Regulated

- Hazard Class: NA
  Subsidiary Risk: NA
  ID Number: NA
  Packing Group: NA

T.D.G.:
Proper Shipping Name: Not Currently Regulated

- Hazard Class: NA
  Subsidiary Risk: NA
  UN Number/PIN: NA
  Packing Group: NA

I.C.A.O.:
I.C.A.O. Proper Shipping Name: Not Currently Regulated

- Hazard Class: NA
  Subsidiary Risk: NA
  ID Number: NA
  Packing Group: NA

I.M.O.:
Proper Shipping Name: Not Currently Regulated

- Hazard Class: NA
  Subsidiary Risk: NA
  ID Number: NA
  Packing Group: NA

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.

15. REGULATORY INFORMATION

U.S. Federal Regulations:
O.S.H.A.: This product does not meet 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): Not applicable
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.

- 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 no RCRA regulated substances.

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).
CAS Number: Not applicable

Canadian Inventory Status: All ingredients of this product are DSL Listed.

EEC Inventory Status: All ingredients used to make this product are listed on EINECS / ELINCS.
Australian Inventory (AICS) Status: All ingredients are listed.
New Zealand Inventory (NZIoC) Status: All components either listed or exempt.
Korean Inventory (KECI) Status: All components of this product are either listed, listed as the anhydrous compound or exempt.
Japan (ENCS) Inventory Status: All components either listed or exempt.
China (PRC) Inventory (MEP) Status: All components either listed or exempt.

16. OTHER INFORMATION


Complete Text of H phrases referred to in Section 3: Not applicable
Revision Summary: Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS (ST/SG/AC.10/36/Add.3).

Date of MSDS Preparation:
Day: 02
Month: June
Year: 2014

MSDS Prepared: MSDS prepared by Product Compliance Department extension 3350

CCOHS Evaluation Note: It is offered under exemption from WHMIS labeling as specified in the Controlled Products Regulation (CPR) Section 17. It is offered under the interim policy that was established by Health Canada permitting use of GHS-formatted safety data sheets in Canada prior to revision of CPR to GHS.

Legend:
NA - Not Applicable  w/w - weight/weight
ND - Not Determined  w/v - weight/volume
NV - Not Available  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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