

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>
2660249	N/A	Hach Company	ROWGHS	English	1

---

Total Enclosures: 1

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

MSDS No: M01360

# SAFETY DATA SHEET

---

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** StablCal® Standard, 100 NTU

**Catalog Number:** 2660249

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:** M01360

**Chemical Name:** Not applicable

**CAS Number:** Not applicable

**Additional CAS No. (for hydrated forms):** Not applicable

**Chemical Formula:** Not applicable

**Chemical Family:** Mixture

**Intended Use:** Laboratory Use Standard solution

---

## 2. HAZARDS IDENTIFICATION

**GHS Classification:**

**Hazard categories:** Respiratory or Skin Sensitization: Skin Sens.1 Respiratory or Skin Sensitization: Resp. Sens.1

**GHS Label Elements:**

DANGER



**Hazard statements:** May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Precautionary statements:** Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves / protective clothing / eye protection / face protection. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. IF INHALED: Remove victim/person to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

**HMIS:**

**Health:** 2

**Flammability:** 0

**Reactivity:** 0

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

**NFPA:**

**Health:** 2

**Flammability:** 0

**Reactivity:** 0

**Symbol:** Not applicable

**WHMIS Hazard Classification:** Class D, Division 2, Subdivision B - Toxic material (other toxic effects)

**WHMIS Symbols:** Other Toxic Effects

---

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Hazardous Components according to GHS:**

### Hexamethylenetetramine

**CAS Number:** 100-97-0

**Chemical Formula:** C<sub>6</sub>H<sub>12</sub>N<sub>4</sub>

**GHS Classification:** Flam. Sol. 1, H228; Acute Tox. 4-Orl, H302; Skin Sens. 1, H317; Resp. Sens. 1, H334

**Percent Range:** < 5.0

**Percent Range Units:** weight / weight

**PEL:** 15 mg/m<sup>3</sup> as inhalable dust; 5 mg/m<sup>3</sup> as respirable dust

**TLV:** 10 mg/m<sup>3</sup> as inhalable dust; 3 mg/m<sup>3</sup> as respirable dust

**WHMIS Symbols:** Flammable / Combustible Other Toxic Effects

### Paraformaldehyde

**CAS Number:** 30525-89-4

**Chemical Formula:** (CH<sub>2</sub>O)<sub>x</sub>

**GHS Classification:** Flam. Sol. 2, H228; Acute Tox. 4-Orl, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Dam. 1, H318; Acute Tox. 4-Inh, H332; STOT Single 3, H335; Carc. 2, H351; Aquatic Acute 3, H402

**Percent Range:** Not determined

**Percent Range Units:** Not determined

**PEL:** 0.75 ppm as formaldehyde

**TLV:** 0.3 ppm as formaldehyde

**WHMIS Symbols:** Other Toxic Effects

### Formaldehyde

**CAS Number:** 50-00-0

**Chemical Formula:** CH<sub>2</sub>O

**GHS Classification:** Flam. Liq. 4, H227; Acute Tox. 3 -Orl, H301; Acute Tox. 3 -Derm, H311; Skin Corr. 1B, H314; Skin Sens. 1, H317; Acute Tox. 3-Inh, H331; Resp. Sens. 1, H334; Muta. 2, H341; Carc. 2, H351; Repr. 2, H361; STOT Single 1, H370; Aquatic Acute 2, H401

**Percent Range:** Not determined

**Percent Range Units:** Not determined

**PEL:** 0.75 ppm

**TLV:** 0.3 ppm

**WHMIS Symbols:** Acute Poison Other Toxic Effects

**Hazardous Components according to GHS:** No

### Demineralized Water

**CAS Number:** 7732-18-5

**Chemical Formula:** H<sub>2</sub>O

**GHS Classification:** Not a dangerous substance according to GHS.

**Percent Range:** > 90.0

**Percent Range Units:** weight / weight

**PEL:** Not established

**TLV:** Not established

**WHMIS Symbols:** Not applicable

### Formazin Polymer

**CAS Number:** Not applicable

**Chemical Formula:** Not applicable

**GHS Classification:** Not applicable

**Percent Range:** < 1.0

**Percent Range Units:** weight / weight

**PEL:** Not established.

**TLV:** Not established.

**WHMIS Symbols:** Not applicable

### Ammonium Sulfate

**CAS Number:** 7783-20-2

**Chemical Formula:**  $(\text{NH}_4)_2\text{SO}_4(\text{NH}_4)_2\text{SO}_4$   
**GHS Classification:** Acute Tox. 5-Orl, H303; Aquatic Acute 3, H402  
**Percent Range:** Not determined  
**Percent Range Units:** Not determined  
**PEL:** Not established  
**TLV:** Not established

**WHMIS Symbols:** Not applicable

#### **Sodium Sulfate**

**CAS Number:** 7757-82-6  
**Chemical Formula:**  $\text{Na}_2\text{SO}_4$   
**GHS Classification:** Aquatic Acute 3, H402  
**Percent Range:** Not determined  
**Percent Range Units:** Not determined  
**PEL:** 15  $\text{mg}/\text{m}^3$  as inhalable dust; 5  $\text{mg}/\text{m}^3$  as respirable dust  
**TLV:** 10  $\text{mg}/\text{m}^3$  as inhalable dust; 3  $\text{mg}/\text{m}^3$  as respirable dust

**WHMIS Symbols:** Not applicable

---

## **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):** Wash skin with soap and plenty of water. Call physician if irritation develops. Remove contaminated clothing.

**Inhalation:** Remove to fresh air. If concerned contact a physician. If you feel unwell, contact a physician

**Ingestion (First Aid):** Never give anything by mouth to an unconscious person. Rinse mouth with plenty of water. Give 1-2 glasses of water. If concerned contact a physician. If you feel unwell, contact a physician.

---

## **5. FIRE FIGHTING MEASURES**

**Flammable Properties:** Material is not classified as flammable according to GHS criteria. During a fire, this product decomposes to form toxic gases.

**Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear. Evacuate area and fight fire from a safe distance.

**Extinguishing Media:** Use media appropriate to surrounding fire conditions

**Extinguishing Media NOT To Be Used:** Not applicable

**Fire / Explosion Hazards:** May react violently with: strong acids strong oxidizers

**Hazardous Combustion Products:** This material will not burn.

---

## **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.

**Containment Technique:** Stop spilled material from being released to the environment. Absorb spilled liquid with non-reactive sorbent material. Dike large spills to keep spilled material from entering sewage and drainage systems or bodies of water.

**Clean-up Technique:** Absorb spilled liquid with non-reactive sorbent material. Sweep up material. Place material in a plastic bag. Dispose of in accordance with local, state and federal regulations or laws. 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.

**DOT Emergency Response Guide Number:** Not applicable

---

## **7. HANDLING AND STORAGE**

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

**Storage:** Store between 5 - 25 °C. Keep away from: direct sunlight Protect from: heat acids oxidizers

**Flammability Class:** Not applicable

---

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Have an eyewash station nearby. Maintain general industrial hygiene practices when using this product.

**Personal Protective Equipment:**

**Eye Protection:** safety glasses with top and side shields

**Skin Protection:** nitrile gloves lab coat

**Inhalation Protection:** adequate ventilation

**Precautionary Measures:** Avoid contact with: eyes skin Do not breathe: mist/vapor Wash thoroughly after handling. Keep away from: acids/acid fumes oxidizers

**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:** Turbid, milky suspension

**Physical State:** Liquid

**Molecular Weight:** Not applicable

**Odor:** Odorless

**Odor Threshold:** Not applicable

**pH:** 8.14

**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):** 1.01

**Viscosity:** Not determined

**Solubility:**

**Water:** Miscible

**Acid:** Miscible

**Other:** Not determined

**Partition Coefficient (n-octanol / water):** Not applicable

**Coefficient of Water / Oil:** Not applicable

**Melting Point:** 0 °C (32 °F)

**Decomposition Temperature:** Not determined

**Boiling Point:** 100 °C (212 °F)

**Vapor Pressure:** ~ 17.5 mm Hg (2.27 kPa) at 20 °C (68 °F)

**Vapor Density (air = 1):** 0.62

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

**Volatile Organic Compounds Content:** Not determined

**Flammable Properties:** Material is not classified as flammable according to GHS criteria. During a fire, this product decomposes to form toxic gases.

**Flash Point:** Not applicable

**Method:** Not applicable

**Flammability Limits:**

**Lower Explosion Limits:** Not applicable

**Upper Explosion Limits:** Not applicable

**Autoignition Temperature:** Not applicable

**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.

---

## 10. STABILITY AND REACTIVITY

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

**Mechanical Impact:** None reported

**Static Discharge:** None reported.

**Reactivity / Incompatibility:** Incompatible with: oxidizers acids

**Hazardous Decomposition:** Heating to decomposition releases: ammonia carbon monoxide formaldehyde nitrogen oxides

**Conditions to Avoid:** Extreme temperatures Heating to decomposition.

---

## 11. TOXICOLOGICAL INFORMATION

**Toxicokinetics, Metabolism and Distribution:** No information available for mixture.

**Toxicologically Synergistic Products:** None reported

**Acute Toxicity:** Acute Toxicity Estimate (ATE) - Calculated from Ingredient Toxicity Data Practically Non-toxic Based on classification principles, the classification criteria are not met.

**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:** Skin Sensitizer Respiratory Sensitizer Contains a sensitizing compound.

Hexamethylenetetramine

**CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction):** Based on classification principles, the classification criteria are not met.

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:** Large doses may cause: gastrointestinal tract irritation kidney damage

**Inhalation:** May cause: allergic respiratory reaction

**Skin Absorption:** None Reported

**Chronic Effects:** Chronic overexposure may cause symptoms similar to acute exposure.

**Medical Conditions Aggravated:** Allergies or sensitivity to hexamethylenetetramine.

---

## 12. ECOLOGICAL INFORMATION

**Product Ecological Information:** --

No ecological data available for this product. Mobility in soil: No data available Based on classification principles, not classified as hazardous to the environment.

**Ingredient Ecological Information:** Hexamethylenetetramine, Water: Persistent, not bioaccumulative or inherently toxic to aquatic organisms.

Ecological data for ingredients is not indicative of likely ecological harm. CEPA categorization for ingredients are as follows:

---

## 13. DISPOSAL CONSIDERATIONS

**EPA Waste ID Number:** Not applicable

**Special Instructions (Disposal):** Dilute material with excess water making a weaker than 5% solution. If permitted by regulation, Open cold water tap completely, slowly pour the material to the drain. Flush system with plenty of water. Otherwise, Check with national, local municipal and state authorities and waste contractors for pertinent local information on the disposal of this article.

**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 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

**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):** Not applicable

**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

**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. CCINFO RTECS. Canadian Centre for Occupational Health and Safety. Hamilton, Ontario Canada: 30 June 1993. 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. IARC Monographs on the Evaluation of the Carcinogenic Risks to Humans. World Health Organization (Volumes 1-42) Supplement 7. France: 1987. Lefevre, Marc J. First Aid Manual for Chemical Accidents, 2nd Ed. New York: Van Nostrand Reinhold Company, 1989. List of Dangerous Substances Classified in Annex I of the EEC Directive (67/548) - Classification, Packaging and Labeling of Dangerous Substances, Amended July 1992. Sixth Annual Report on Carcinogens, 1991. U.S. Department of Health and Human Services. Rockville, MD: Technical Resources, Inc. 1991. Technical Judgment. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Verschuereen, Karel. Handbook of Environmental Data on Organic Chemicals. New York: Van Nostrand Reinhold Co., 1977.

**Complete Text of H phrases referred to in Section 3:**

**Revision Summary:** . Substantially Revised MSDS 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:** 28

**Month:** January

**Year:** 2014

**MSDS Prepared:** MSDS prepared by Product Compliance Department extension 3350

**CCOHS Evaluation Note:** This product has been classified and labeled in accordance with the requirements of GHS (ST/SG/AC.10/36/Add.3). 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.**

HACH COMPANY ©2015