

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

MSDS No: M01360

## Material 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 No.:** Not applicable  
**Chemical Formula:** Not applicable  
**Chemical Family:** Not applicable  
**Hazard:** May cause irritation. May cause allergic reaction.  
**Date of MSDS Preparation:**  
**Day:** 4  
**Month:** 05  
**Year:** 2002

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

#### Hexamethylenetetramine

**CAS No.:** 100-97-0  
**TSCA CAS Number:** 100-97-0  
**Percent Range:** 1.0 - 10.0  
**Percent Range Units:** weight / volume  
**LD50:** Oral mouse LDLo = 512 mg/kg  
**LC50:** None reported  
**TLV:** Not established  
**PEL:** Not established  
**Hazard:** May cause irritation. Flammable solid. May cause allergic reaction.

#### Demineralized Water

**CAS No.:** 7732-18-5  
**TSCA CAS Number:** 7732-18-5  
**Percent Range:** 90.0 - 100.0  
**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:** < 1.0  
**Percent Range Units:** weight / 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.

**Formazin Polymer**

**CAS No.:** Not available  
**TSCA CAS Number:** Various  
**Percent Range:** < 1.0  
**Percent Range Units:** weight / weight  
**LD50:** None reported.  
**LC50:** None reported.  
**TLV:** Not established.  
**PEL:** Not established.  
**Hazard:** Toxic properties unknown.

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### 3. HAZARDS IDENTIFICATION

**Emergency Overview:**

**Appearance:** Turbid, milky suspension  
**Odor:** None  
MAY CAUSE EYE AND SKIN IRRITATION  
MAY CAUSE ALLERGIC SKIN REACTION

**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

**Potential Health Effects:**

**Eye Contact:** May cause irritation  
**Skin Contact:** May cause irritation May cause allergic reaction  
**Skin Absorption:** None reported  
**Target Organs:** Not applicable  
**Ingestion:** May cause: gastrointestinal irritation kidney damage  
**Target Organs:** Kidneys  
**Inhalation:** No effects anticipated  
**Target Organs:** Not applicable  
**Medical Conditions Aggravated:** Allergies or sensitivity to hexamethylenetetramine.  
**Chronic Effects:** Chronic overexposure may cause symptoms similar to acute exposure.  
**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 mutagen.  
**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 soap and plenty of water.  
**Ingestion (First Aid):** Induce vomiting using syrup of ipecac or by sticking finger down throat. Never give anything by mouth to an unconscious person. Call physician immediately.

*Inhalation:* None required.

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## 5. FIRE FIGHTING MEASURES

*Flammable Properties:* 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 determined

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

*Fire / Explosion Hazards:* None reported

*Static Discharge:* None reported.

*Mechanical Impact:* None reported

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

*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.

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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.

*Containment Technique:* 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. 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.

*Special Instructions (for accidental release):* Not applicable

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

*D.O.T. Emergency Response Guide Number:* Not applicable

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## 7. HANDLING / 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:* Keep container tightly closed when not in use. Protect from: heat

*Flammability Class:* Not applicable

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## 8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

*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:* disposable latex gloves

*Inhalation Protection:* adequate ventilation

*Precautionary Measures:* Avoid contact with: eyes skin Do not breathe: mist/vapor Wash thoroughly after handling.

*TLV:* Not established

*PEL:* Not established

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## 9. PHYSICAL / CHEMICAL PROPERTIES

*Appearance:* Turbid, milky suspension

*Physical State:* Liquid

*Molecular Weight:* Not applicable

**Odor:** None  
**pH:** 8.14  
**Vapor Pressure:** Not determined  
**Vapor Density (air = 1):** Not determined  
**Boiling Point:** 100°C  
**Melting Point:** Not applicable  
**Specific Gravity (water = 1):** 1.01  
**Evaporation Rate (water = 1):** Not determined  
**Volatile Organic Compounds Content:** Not determined  
**Partition Coefficient (n-octanol / water):** Not applicable  
**Solubility:**  
**Water:** Miscible  
**Acid:** Miscible  
**Other:** Not determined  
**Metal Corrosivity:**  
**Steel:** Not determined  
**Aluminum:** Not determined

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## 10. STABILITY / REACTIVITY

**Chemical Stability:** Stable when stored under proper conditions.  
**Conditions to Avoid:** Extreme temperatures  
**Reactivity / Incompatibility:** Incompatible with: oxidizers  
**Hazardous Decomposition:** Heating to decomposition releases: ammonia carbon monoxide formaldehyde nitrogen oxides  
**Hazardous Polymerization:** Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

**Product Toxicological Data:**  
**LD50:** None reported  
**LC50:** None reported  
**Dermal Toxicity Data:** None reported  
**Skin and Eye Irritation Data:** None reported  
**Mutation Data:** Hexamethylenetetramine: Cytogenic analysis in human HeLa cells @ 1 mmol/l; Oncogenic Transformation - hamster kidney - 10 mg/L  
**Reproductive Effects Data:** None reported  
**Ingredient Toxicological Data:** Hexamethylenetetramine: Oral mouse LDLo = 512 mg/kg

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## 12. ECOLOGICAL INFORMATION

**Product Ecological Information:** --  
No ecological data available for this product.  
**Ingredient Ecological Information:** Hexamethylenetetramine: Water Pollution Factors: BOD<sub>5</sub>: 0.015, 0.026, std. dil. sew.

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## 13. DISPOSAL CONSIDERATIONS

**EPA Waste ID Number:** Not applicable  
**Special Instructions (Disposal):** Dilute material with excess water making a weaker than 5% solution. Open cold water tap completely, slowly pour the material to the drain. Flush system with plenty of water.  
**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:** Not Currently Regulated

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**DOT Hazard Class:** NA  
**DOT Subsidiary Risk:** NA  
**DOT ID Number:** NA  
**DOT Packing Group:** NA

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

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**ICAO Hazard Class:** NA  
**ICAO Subsidiary Risk:** NA  
**ICAO ID Number:** NA  
**ICAO Packing Group:** NA

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

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**I.M.O. Hazard Class:** NA  
**I.M.O. Subsidiary Risk:** NA  
**I.M.O. ID Number:** NA  
**I.M.O. Packing Group:** NA

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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 Delayed (Chronic) 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.

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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 no RCRA regulated substances.

**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):** 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:** Standard solution

**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. Verschueren, Karel. Handbook of Environmental Data on Organic Chemicals. New York: Van Nostrand Reinhold Co., 1977.

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**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.  
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