

# MATERIAL SAFETY DATA SHEET

## MSDS

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Date-Issued: 09/12/1997  
MSDS Ref. No: AHYD23435  
Date-Revised: 04/06/2000  
Revision No: 1

### Hydrotech Hy-Cal

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#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Hydrotech Hy-Cal  
GENERAL USE: Calcium hardness increaser.  
CHEMICAL FAMILY: Inorganic salt

##### MANUFACTURER

Asepsis, Inc.  
Hydrotech  
P.O. Box 537  
Avondale Estates, GA 30002  
Customer SERVICE: (800) 959-7946

##### 24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (Transportation) (800) 424-9300  
Poison Control Center (Medical)(877) 800-5553

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#### 2. COMPOSITION / INFORMATION ON INGREDIENTS

| <u>Chemical Name</u> | <u>CAS#</u> | <u>Wt.%</u> |
|----------------------|-------------|-------------|
| Calcium chloride     | 10043-52-4  | 75 – 97     |
| Sodium chloride      | 7647-14-5   | 1 – 2       |
| Potassium chloride   | 7447-40-7   | 2 – 3       |
| Water                | 7732-18-5   | 0 – 7       |
| Strontium Chloride   | 10476-85-4  | 0 – 1       |

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#### 3. HAZARDS IDENTIFICATION

##### EMERGENCY OVERVIEW

###### PHYSICAL APPEARANCE:

Colorless to off-white, odorless, solid

###### IMMEDIATE CONCERNS:

CAUTION: May cause skin and eye irritation. May be harmful if swallowed. Avoid contact with eyes, skin or clothing. Wear goggles or safety glasses and rubber gloves when handling this product. May be irritating to nose and throat. Avoid breathing dust. Remove and wash contaminated clothing before reuse. Do not mix with other chemicals.

##### POTENTIAL HEALTH EFFECTS

###### EYES:

Product may cause slight eye irritation. Dusts may cause severe irritation with corneal injury. Effects may be slow to heal. When dissolving, the heat produced may cause more intense effects as well as thermal burns.

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#### SKIN:

Short single exposure not likely to cause significant skin irritation. Prolonged or repeated exposure may cause skin irritation, possibly leading to a burn. May cause more severe response if skin is damp, abraded (scratched or cut), or material is confined on skin.

#### SKIN ABSORPTION:

A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

#### INGESTION:

Single dose oral toxicity is considered to be low, however, ingestion may cause gastrointestinal irritation or ulceration.

#### INHALATION:

Dust may cause irritation to upper respiratory tract. Avoid breathing dust or vapors.

#### CHRONIC:

There are no known chronic hazards.

#### ROUTES OF ENTRY:

Skin Contact, Inhalation, Ingestion, Eye Contact.

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## 4. FIRST AID MEASURES

#### EYES:

If contact with eyes occurs: Immediately flush with cold water for at least 15 minutes. Then get immediate medical attention.

#### SKIN:

If contact with skin: Rinse off excess chemical and flush skin with cold water for at least 15 minutes. If skin irritation develops, seek immediate medical attention.

#### INGESTION:

If swallowed: Drink promptly large quantities of water. Do not induce vomiting. Avoid alcohol. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

#### INHALATION:

If inhaled: Remove to fresh air. If breathing is difficult, have trained person administer oxygen. If not breathing, give artificial respiration. Call a physician immediately.

#### NOTES TO PHYSICIAN:

If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

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#### 5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: Not Applicable

**GENERAL HAZARD:**

This product is not flammable or combustible.

**EXTINGUISHING MEDIA:**

This material does not burn. If exposed to fire from another source, use suitable extinguishing agent for that fire.

**FIRE FIGHTING EQUIPMENT:**

Firefighters should wear full protective clothing and self contained breathing apparatus (SCBA). Thoroughly decontaminate fire fighting equipment including all fire fighting wearing apparel after the incident.

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#### 6. ACCIDENTAL RELEASE MEASURES

**GENERAL PROCEDURES:**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Utilizing appropriate protective clothing and safety equipment, contain spilled material. Using clean dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place in clean dry plastic containers for disposal. Dispose of according to local, state, and federal regulations.

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#### 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:**

Avoid contact with eyes, skin or clothing. Avoid breathing dust.

**HANDLING:**

Mix only with water. Never add water to product. Always add product to large quantities of water. Do not mix with other chemicals. Use clean dry utensils. Do not add this product to any dispensing device containing remnants of any other product. Such use may cause a violent reaction leading to fire or explosion.

**STORAGE:**

Keep this product in its original container when not in use. Store in cool, dry, well-ventilated area. Keep this product and all other chemicals out of children's reach.

**COMMENTS:**

When calcium chloride is being dissolved in water, large amounts of heat develop. Always add product to large quantities of water.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE GUIDELINES:

#### OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

|                    |      | EXPOSURE LIMITS    |                               |                  |                                |                        |                                   |
|--------------------|------|--------------------|-------------------------------|------------------|--------------------------------|------------------------|-----------------------------------|
|                    |      | OSHA PEL<br>ppm    | OSHA PEL<br>mg/m <sup>3</sup> | ACGIH TLV<br>ppm | ACGIH TLV<br>mg/m <sup>3</sup> | SUPPLIER OEL<br>ppm    | SUPPLIER OEL<br>mg/m <sup>3</sup> |
| Calcium chloride   | TWA  | N/E <sup>[1]</sup> |                               | N/E              |                                | 10 mg/l <sup>[2]</sup> |                                   |
| Strontium Chloride | TWA  |                    |                               |                  |                                | 15 <sup>[3]</sup>      |                                   |
|                    | STEL |                    |                               |                  |                                | 15 <sup>[4]</sup>      |                                   |

#### OSHA TABLE COMMENTS:

1. N/E = Not Established
2. Dow Chemical
3. Total Dust
4. Respirable Dust

### ENGINEERING CONTROLS:

General room ventilation plus local exhaust should be used to minimize exposure to dust/vapors.

### PERSONAL PROTECTIVE EQUIPMENT:

#### EYES AND FACE:

Wear goggles or safety glasses with side shields when handling this product.

#### SKIN:

Wear rubber gloves when handling this product. Avoid contact with skin.

#### RESPIRATORY:

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

### WORK HYGIENIC PRACTICES:

Remove and wash contaminated clothing before reuse.

#### OTHER USE PRECAUTIONS:

Facilities storing or utilizing this material should be equipped with an eyewash and safety shower.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid

ODOR: Odorless

APPEARANCE: Pellets or Crystals

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COLOR: White to off-white  
pH: Not Determined  
VAPOR PRESSURE: <0.005 mmHg at 20°C  
VAPOR DENSITY: Not Applicable  
BOILING POINT: >815°C (1500°F)  
MELTING POINT: ~772°C (1424°F)  
SOLUBILITY IN WATER: Soluble  
SPECIFIC GRAVITY: 2.2 g/cc at 25°C

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## 10. STABILITY AND REACTIVITY

### CONDITIONS TO AVOID:

High temperature. Poor ventilation. Contamination. Moisture/high humidity.

### STABILITY:

This product is stable under normal conditions.

### POLYMERIZATION:

Hazardous polymerization will not occur under normal conditions.

### HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition products may include toxic and corrosive fumes of chlorine

### INCOMPATIBLE MATERIALS:

Avoid contact with water or metals of concentrated material. Other swimming pool/spa chemicals in their concentrated forms. Product is hygroscopic.

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## 11. TOXICOLOGICAL INFORMATION

### ACUTE

SKIN ABSORPTION: >5000 mg/kg in rabbits  
ORAL LD<sub>50</sub>: 967-1668 mg/kg of body weight in rats

### EYE EFFECTS:

This product is an eye irritant.

### SKIN EFFECTS:

This product is a skin irritant.

### CARCINOGENICITY:

This product is not listed as a carcinogen by IARC.  
This product is not listed as a carcinogen by NTP.  
This product is not listed as a carcinogen by OSHA.

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#### MUTAGENICITY:

This product is not mutagenic in several in vitro tests.

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## 12. ECOLOGICAL INFORMATION

#### ECOTOXICOLOGICAL INFORMATION:

Based largely on data for the major component, this material is practically non-toxic to aquatic organisms on an acute basis (LC50 greater than 100 mg/L in most sensitive species). Using best practices, keep product from entering waterways and watersheds.

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## 13. DISPOSAL CONSIDERATIONS

#### DISPOSAL METHOD:

Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor. Contact with incompatible materials could cause a reaction or fire.

#### PRODUCT DISPOSAL:

Disposal of unused, uncontaminated product is regulated according to local, state and federal regulations.

#### EMPTY CONTAINER:

Do not reuse container. Rinse thoroughly before discarding in trash.

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## 14. TRANSPORT INFORMATION

#### DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not Regulated.

OTHER SHIPPING INFORMATION: Bill of Lading Description - Compounds, Swimming Pool, Cleaning or Water Treating, Dry or Liquid (NMFC 50086)

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## 15. REGULATORY INFORMATION

#### UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

313 REPORTABLE INGREDIENTS: This product or its components are not listed.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: This product or its components are not listed.

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#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: This product or its components are not subject to export notification.

TSCA STATUS: This product or its components are listed on the TSCA Inventory.

#### OSHA HAZARD COMM. RULE:

Product is hazardous by definition of the Hazardous Communication Standard.

#### FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT):

This product is not a registered pesticide.

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## 16. OTHER INFORMATION

### REVISION SUMMARY

Revision #: 1

This MSDS replaces the September 12, 1997 MSDS. Any changes in information are as follows:

In Section 2

Physical Appearance (text) Potential Health Effects - Eyes (text) Potential Health Effects - Skin (text) Potential Health Effects - Skin Absorption (text) Potential Health Effects - Inhalation (text) Potential Health Effects - Ingestion (text)

In Section 3

Firstaid - Ingestion (text)

In Section 8

Appearance (text) Odor (text) (Group Field) for pH Vapor Pressure (Value) Vapor Pressure °F (Group Field) for Vapor Pressure Density Boiling Point (Operator) Boiling °F (From) Boiling °C (From) Melting °F (From) Melting °C (From) Specific Gravity (From) Vapor Pressure (Operator) Specific Gravity °C

In Section 9

Hazardous Decomposition Products (text) Incompatible Materials (text)

In Section 10

Oral LD50 (Value) Oral LD50 (Unit)

In Section 11

Ecotoxicological Information (text)

### NFPA CODES

HEALTH: 2    FIRE: 0    REACTIVITY: 1

### HMIS CODES

HEALTH: 2    FIRE: 0    REACTIVITY: 1    PROTECTION: B

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IMPORTANT: This information is given without a warranty or guarantee. No suggestions for use are intended or shall be construed as a recommendation to infringe any existing patents or violate any Federal, State or local laws. Safe handling and use is the responsibility of the customer. Read the label before using this product. This information is true and accurate to the best of our knowledge.

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