



## HD Detergent for Hard Water

Revision: 2025-06-11

Version: 01.0

### 1. IDENTIFICATION

**Product name:** HD Detergent for Hard Water  
**SDS #:** USC101216U  
**Recommended use:**

- Industrial/Institutional
- Dishmachine Detergent
- This product is intended to be diluted prior to use

**Uses advised against:** Uses other than those identified are not recommended

**Manufacturer, importer, supplier:**  
 U S Chemical  
 316 Hart Street Watertown, WI 53094 USA  
 Tel. 1-800-558-9566 USA  
 Website: USCHEMICAL.COM

**Emergency telephone number:** 1-866-923-4913 USA

### 2. HAZARDS IDENTIFICATION

#### Classification for the undiluted product

Skin corrosion, Category 1A  
 Serious eye damage, Category 1  
 Corrosive to metals, Category 1



**Signal word:** **Danger.**

#### Hazard Statements

**CAUSES SEVERE SKIN BURNS AND SERIOUS EYE DAMAGE. MAY BE CORROSIVE TO METALS.**

#### Precautionary Statements

Causes burns/ serious damage to mouth, throat and stomach. Keep container tightly closed. Keep only in original container. Avoid contact with eyes, skin and clothing. Wash affected areas thoroughly after handling. Wear protective gloves, protective clothing and eye or face protection. IF SWALLOWED: Rinse mouth. DO NOT induce vomiting unless directed to do so by medical personnel. Drink a cupful of milk or water. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water for at least 15 minutes. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Immediately call a Poison Center (1-866-923-4913) or physician. Absorb spillage to prevent material damage. Store locked up. Store in corrosive-resistant container with a resistant inner liner. Dispose of in accordance with all federal, state and local applicable regulations. SUPPLEMENTAL INFORMATION: DO NOT MIX WITH AMMONIA, BLEACH OR OTHER CHLORINATED COMPOUNDS. Mix only with water. Can react to release hazardous gases. May vigorously react with acids resulting in spattering and excessive heat.

**Health hazards not otherwise classified (HHNOC)** - Not applicable

**Physical hazards not otherwise classified (PHNOC)** - Not applicable

#### Classification for the diluted product 1:667

This product, when diluted as stated on the label, is not classified as hazardous according to OSHA 29CFR 1910.1200 (HazCom 2012-GHS) and Canadian Hazardous Products Regulations (HPR) (WHMIS 2015-GHS).

#### Hazard and Precautionary Statements

None required. SUPPLEMENTAL INFORMATION: Mix only with water. DO NOT MIX WITH ANY OTHER PRODUCT OR CHEMICAL. Can react to release hazardous gases. May vigorously react with acids resulting in spattering and excessive heat.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

## Classified Ingredients

Ingredient(s)	CAS #	Weight %
Potassium hydroxide	1310-58-3	10 - 30%
Tetrapotassium pyrophosphate	7320-34-5	1 - 5%

## 4. FIRST AID MEASURES

### Undiluted Product:

**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes.

**Skin:** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water for at least 15 minutes. Wash with plenty of water for at least 15 minutes.

**Inhalation:** IF INHALED: Remove person to fresh air and keep comfortable for breathing.

**Ingestion:** IF SWALLOWED: Rinse mouth. DO NOT induce vomiting unless directed to do so by medical personnel. Drink a cupful of milk or water.

**Most Important Symptoms/Effects:** No information available.

**Immediate medical attention and special treatment needed** Not applicable.

### Diluted Product:

**Eyes:** Rinse with plenty of water.

**Skin:** No specific first aid measures are required

**Inhalation:** No specific first aid measures are required

**Ingestion:** IF SWALLOWED: Call a Poison Center (1-866-923-4913) or doctor/physician if you feel unwell.

## 5. FIRE-FIGHTING MEASURES

**Specific methods:**

No special methods required

**Suitable extinguishing media:**

The product is not flammable. Extinguish fire using agent suitable for surrounding fire.

**Specific hazards:**

Corrosive material (See sections 8 and 10).

**Special protective equipment for firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**Extinguishing media which must not be used for safety reasons:** No information available.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Put on appropriate personal protective equipment (see Section 8.).

**Environmental precautions and clean-up methods:**

Clean-up methods - large spillage. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Use a water rinse for final clean-up.

## 7. HANDLING AND STORAGE

**Handling:** Can react to release hazardous gases. May vigorously react with acids resulting in spattering and excessive heat. Do not mix with other products or chemicals except as directed on the label. Mix only with water. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not taste or swallow. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. Avoid breathing vapors or mists. Use only with adequate ventilation. Remove and wash contaminated clothing and footwear before re-use. Absorb spillage to prevent material damage. Do not mix with any other product or chemical. May vigorously react with acids resulting in spattering and excessive heat. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

**Storage:** Store in corrosive-resistant container with a resistant inner liner.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Guidelines:**

Ingredient(s)	ACGIH	OSHA
Potassium hydroxide	2 mg/m <sup>3</sup> (Ceiling)	-

### Undiluted Product:

**Engineering measures to reduce exposure:**

Good general ventilation should be sufficient to control airborne levels.

#### **Personal Protective Equipment**

It is the responsibility of the employer to determine the potential risk of exposure to hazardous chemicals for employees in the workplace in order to determine the necessity, selection, and use of personal protective equipment.

<b>Eye protection:</b>	Chemical-splash goggles.
<b>Hand protection:</b>	Chemical-resistant gloves.
<b>Skin and body protection:</b>	Protective footwear. Wear suitable protective clothing.
<b>Respiratory protection:</b>	No personal protective equipment required under normal use conditions. If aerosols, mists, or vapors are not adequately controlled by ventilation, use appropriate respiratory protection to avoid over-exposure.
<b>Hygiene measures:</b>	Handle in accordance with good industrial hygiene and safety practice.

#### **Diluted Product:**

##### **Engineering measures to reduce exposure:**

Good general ventilation should be sufficient to control airborne levels.

#### **Personal Protective Equipment**

<b>Eye protection:</b>	No personal protective equipment required under normal use conditions.
<b>Hand protection:</b>	No personal protective equipment required under normal use conditions.
<b>Skin and body protection:</b>	No personal protective equipment required under normal use conditions.
<b>Respiratory protection:</b>	No personal protective equipment required under normal use conditions.
<b>Hygiene measures:</b>	Handle in accordance with good industrial hygiene and safety practice.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State** Liquid

**Evaporation Rate:** No information available

**Odor threshold:** No information available.

**Melting point/freezing point (°C):** Not determined

**Autoignition temperature:** No information available

**Solubility in other solvents:** No information available

**Density:** 1.29 Kg/L

**Bulk density:** No information available

**Flash point (°F):** > 200.12 °F > 93.4 °C

**Kinematic viscosity** No information available

**VOC:** 0 % \*

**Flammability (Solid or Gas):** Not applicable

**Sustained combustion:** Not applicable

**Explosion limits: - upper:** Not determined **- lower:** Not determined

**Color:** Clear , Dark , Red

**Odor:** Bland

**Boiling point/range:** Not determined

**Decomposition temperature:** Not determined

**Solubility:** Completely Soluble

**Relative Density (relative to water):** 1.29

**Vapor density:** No information available

**Vapor pressure:** No information available.

**Partition coefficient (n-octanol/water):** No information available

**Elemental Phosphorus:** 2.90 % by wt.

**pH:** >= 11.5

**Corrosion to metals:** Metal corrosive

**Dilution pH:** > 11

**Dilution Flash Point (°F):**

**VOC % by wt. at use dilution:** 0 %

\* - Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5, Article 2, Consumer Products, Sections 94508

## **10. STABILITY AND REACTIVITY**

<b>Reactivity:</b>	Not Applicable
<b>Stability:</b>	The product is stable
<b>Possibility of hazardous reactions:</b>	May vigorously react with acids resulting in spattering and excessive heat.
<b>Hazardous decomposition products:</b>	None reasonably foreseeable.
<b>Materials to avoid:</b>	Acids. Strong acids. Do not mix with any other product or chemical unless specified in the use directions.
<b>Conditions to avoid:</b>	None known.

## **11. TOXICOLOGICAL INFORMATION**

#### **Information on likely routes of exposure:**

Skin contact, Inhalation, Ingestion, Eye contact

#### **Delayed, immediate, or chronic effects and symptoms from short and long-term exposure**

**Skin contact:** Corrosive. Causes severe burns. Symptoms may include burns, blisters, redness and pain (which may be delayed).

**Eye contact:** Corrosive. Causes serious eye damage. Symptoms may include pain, burning sensation, redness, watering, blurred vision or loss of vision.

**Ingestion:** Causes burns/ serious damage to mouth, throat and stomach. Symptoms may include stomach pain and nausea.

**Inhalation:** May cause irritation and corrosive effects to nose, throat and respiratory tract. Symptoms may include coughing and difficulty breathing.

**Sensitization:** No known effects.

**Target Organs (SE):** None known

**Target Organs (RE):** None known

#### **Numerical measures of toxicity**

**ATE - Oral (mg/kg):** >2000

**ATE - Dermal (mg/kg):** >2000

**ATE - Inhalatory, gases (mg/l):** >20000

**ATE - Inhalatory, mists (mg/l):** >5

**ATE - Inhalatory, vapors (mg/l):** >20

## **12. ECOLOGICAL INFORMATION**

**Ecotoxicity:** No information available.

**Persistence and Degradability:** No information available.

**Bioaccumulation:** No information available.

**Mobility:** No information available.

**Other adverse effects** No information available.

## **13. DISPOSAL CONSIDERATIONS**

**Waste from residues / unused products (undiluted product):** This product, as sold, if discarded or disposed, is a hazardous waste according to Federal regulations (40 CFR 261). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the waste solution meets RCRA criteria for hazardous waste. Dispose in compliance with all Federal, state, provincial, and local laws and regulations.

**Waste from residues / unused products (diluted product):** This product, when diluted as stated on this SDS, is a hazardous waste according to Federal regulations (40 CFR 261). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the waste solution meets RCRA criteria for hazardous waste. Dispose in compliance with all Federal, state, provincial, and local laws and regulations. This product, when diluted as stated on this SDS, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the waste solution meets RCRA criteria for hazardous waste. Dispose in compliance with all Federal, state, provincial, and local laws and regulations.

**RCRA Hazard Class (undiluted product):** D002 Corrosive Waste

**RCRA Hazard Class (diluted product):** D002 Corrosive Waste

**Contaminated Packaging:** Do not re-use empty containers.

## **14. TRANSPORT INFORMATION**

**DOT/TDG/IMDG:** The information provided below is the full transportation classification for this product. This description does not account for the package size(s) of this product, that may fall under a quantity exception, according to the applicable transportation regulations. When shipping dangerous goods, please consult with your internal, certified hazardous materials specialist to determine if any exceptions can be applied to your shipment.

**DOT (Ground) Bill of Lading Description:** UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (potassium hydroxide), 8, II

**IMDG (Ocean) Bill of Lading Description:** UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (potassium hydroxide), 8, II

## **15. REGULATORY INFORMATION**

**International Inventories at CAS# Level**TSCA  
DSLAll components are listed or otherwise exempt  
All components are listed or otherwise exempt**US RIGHT TO KNOW (RTK)**

Ingredient(s)	CAS #	MARTK:	NJRTK:	PARTK:	RIRTK:
Water	7732-18-5	-	-	-	-
Potassium hydroxide	1310-58-3	X	X	X	X
Sodium tripolyphosphate	7758-29-4	X	-	X	-
Potassium polyacrylate	25608-12-2	-	-	-	-
Tetrapotassium pyrophosphate	7320-34-5	-	-	-	-

**CERCLA/ SARA**

Ingredient(s)	CAS #	Weight %	CERCLA/SARA RQ (lbs)	Section 302 TPQ (lbs)	Section 313
Potassium hydroxide	1310-58-3	10 - 30%	1000		

**Canadian Regulations****16. OTHER INFORMATION****NFPA (National Fire Protection Association)**

Rating Scale: (Low Hazard) 0 - 4 (Extreme Hazard)

Health 3

Flammability 0

Instability 0

Special Hazards -

**Diluted Product:**

Health 0

Flammability 0

Instability 0

Special Hazards -

Revision: 2025-06-11

Version: 01.0

Reason for revision:

Not applicable

Prepared by:

North American Regulatory Affairs

Additional advice:

• Does not contain an added fragrance

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