

# Total Clean S

## Safety Data Sheet

### SECTION 1: Product and company identification

Product name : Total Clean S  
Use of the substance/mixture : Water treatment  
Product code : 582714 SDS Number: 19589906  
Company : Qual-Chem Corp.  
PMB #622, 2220 Otay Lakes Rd Ste 502  
Chula Vista, CA 91915-1009 - USA  
T (866) 962-6168  
Emergency number : EMERGENCY # CHEMREC: (800) 424-9300

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS-US)

Met. Corr. 1 H290

Skin Corr. 1A H314

Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: May be corrosive to metals

Causes severe skin burns and eye damage

Precautionary statements (GHS-US)

: Keep only in original container

Do not breathe mist, spray

Wash thoroughly after handling

Wear eye protection, protective clothing, protective gloves

If swallowed: rinse mouth. Do NOT induce vomiting

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

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

Immediately call a doctor, a POISON CENTER

Wash contaminated clothing before reuse

Absorb spillage to prevent material damage

Store locked up

Store in corrosive resistant container with a resistant inner liner

Dispose of contents/container to comply with local/regional/national/international regulations.

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

Full text of H-phrases: see section 16

#### 3.2. Mixture

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Name	Product identifier	%	Classification (GHS-US)
potassium hydroxide, 45%=<conc<50%, aqueous solutions	(CAS No) 1310-58-3	1-5	Met. Corr. 1, H290 Acute Tox. 3 (Oral), H301 Skin Corr. 1A, H314
tetrapotassium pyrophosphate, anhydrous	(CAS No) 7320-34-5	1-5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Causes severe skin burns and eye damage.

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Caustic burns/corrosion of the skin.

Symptoms/injuries after eye contact : Causes serious eye damage. Corrosion of the eye tissue. Permanent eye damage.

Symptoms/injuries after ingestion : May be harmful if swallowed. Burns to the gastric/intestinal mucosa. Gastrointestinal complaints. Cramps.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : All extinguishing media allowed.

### 5.2. Special hazards arising from the substance or mixture

Reactivity : Upon combustion: CO and CO<sub>2</sub> are formed.

### 5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Isolate from fire, if possible, without unnecessary risk.

#### 6.1.1. For non-emergency personnel

Protective equipment : Protective goggles. Gloves. Protective clothing.

Emergency procedures : Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area.

#### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Stop leak if safe to do so. Stop release. Ventilate area.

### 6.2. Environmental precautions

Avoid release to the environment. Prevent soil and water pollution.

### 6.3. Methods and material for containment and cleaning up

For containment : Contain released substance, pump into suitable containers.

Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation.

### 6.4. Reference to other sections

No additional information available

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing.

Hygiene measures : Wash thoroughly after handling. Wash contaminated clothing before reuse.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations. Add ALLWAYS product to water for dilution/mixture. Never add water to this product.

Storage conditions : Keep container closed when not in use.

Incompatible products : acids.

Prohibitions on mixed storage : KEEP SUBSTANCE AWAY FROM: (strong) acids.

Storage area : Meet the legal requirements. Store in a dry area. Store in a cool area.

Special rules on packaging : meet the legal requirements. Keep only in original container.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

**potassium hydroxide, 45%=<conc<50%, aqueous solutions (1310-58-3)**

ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
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#### 8.2. Exposure controls

Personal protective equipment : Use appropriate personal protective equipment when risk assessment indicates this is necessary. Gloves. Safety glasses. Protective clothing.



### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : clear. brown. Liquid.

Odor : characteristic

Odor threshold : No data available

pH : 13 - 14

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : > 200 °F Closed Cup

Relative evaporation rate (butyl acetate=1) : No data available

Flammability (solid, gas) : No data available

Explosion limits : No data available

Explosive properties : No data available

Oxidizing properties : No data available

Vapor pressure : No data available

Relative density : No data available

Relative vapor density at 20 °C : No data available

Specific gravity / density : 1.07 g/ml

Solubility : Soluble in water.

Log Pow : No data available

Log Kow : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

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Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
VOC content	: ND

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Upon combustion: CO and CO<sub>2</sub> are formed.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

acids.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

#### **potassium hydroxide, 45%=<conc<50%, aqueous solutions (1310-58-3)**

LD50 oral rat	273 mg/kg (Rat)
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ATE CLP (oral)	273.000 mg/kg body weight
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#### **tetrapotassium pyrophosphate, anhydrous (7320-34-5)**

LD50 dermal rabbit	> 4640 mg/kg (Rabbit)
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Skin corrosion/irritation : Causes severe skin burns and eye damage.

pH: 13 - 14

Serious eye damage/irritation : Not classified.

pH: 13 - 14

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Caustic burns/corrosion of the skin.

Symptoms/injuries after eye contact : Causes serious eye damage. Corrosion of the eye tissue. Permanent eye damage.

Symptoms/injuries after ingestion : May be harmful if swallowed. Burns to the gastric/intestinal mucosa. Gastrointestinal complaints. Cramps.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### **potassium hydroxide, 45%=<conc<50%, aqueous solutions (1310-58-3)**

LC50 fish 1	28.6 mg/l (24 h; Pisces; Pure substance)
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LC50 other aquatic organisms 1	100 - 1000 mg/l (96 h)
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potassium hydroxide, 45%=<conc<50%, aqueous solutions (1310-58-3)

LC50 fish 2	80 mg/l (96 h; <i>Gambusia affinis</i> ; Pure substance)
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Threshold limit other aquatic organisms 1	100 - 1000,96 h
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tetrapotassium pyrophosphate, anhydrous (7320-34-5)

LC50 fish 1	> 750 mg/l (48 h; <i>Leuciscus idus</i> )
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### 12.2. Persistence and degradability

potassium hydroxide, 45%=<conc<50%, aqueous solutions (1310-58-3)

Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available.
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Biochemical oxygen demand (BOD)	Not applicable
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Chemical oxygen demand (COD)	Not applicable
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ThOD	Not applicable
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BOD (% of ThOD)	Not applicable
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tetrapotassium pyrophosphate, anhydrous (7320-34-5)

Persistence and degradability	Biodegradability: not applicable.
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Biochemical oxygen demand (BOD)	Not applicable
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Chemical oxygen demand (COD)	Not applicable
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ThOD	Not applicable
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BOD (% of ThOD)	Not applicable
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### 12.3. Bioaccumulative potential

potassium hydroxide, 45%=<conc<50%, aqueous solutions (1310-58-3)

Bioaccumulative potential	Not bioaccumulative.
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tetrapotassium pyrophosphate, anhydrous (7320-34-5)

Bioaccumulative potential	Bioaccumulation: not applicable.
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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

## SECTION 14: Transport information

### Department of Transportation (DOT)

Transport document description : UN3266 Corrosive liquid, basic, inorganic, n.o.s. (Potassium Hydroxide), 8, II

UN-No.(DOT) : UN3266

Proper Shipping Name (DOT) : Corrosive liquid, basic, inorganic, n.o.s.

Transport hazard class(es) (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) : 8 - Corrosive



Packing group (DOT) : II - Medium Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 202

DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Symbols : G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102) : B2,IB2,T11,TP2,TP27

DOT Packaging Exceptions (49 CFR 173.xxx) : 154

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 1 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 30 L

DOT Vessel Stowage Location : B

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DOT Vessel Stowage Other

: 40 - Stow "clear of living quarters", 52 - Stow "separated from" acids

### Additional information

Other information : No supplementary information available.

### ADR

No additional information available

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

### **potassium hydroxide, 45%=<conc<50%, aqueous solutions (1310-58-3)**

Not listed on SARA Section 313 (Specific toxic chemical listings)

RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
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California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity

## SECTION 16: Other information

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

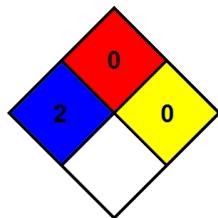
Full text of H-phrases:

Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
H290	May be corrosive to metals
H301	Toxic if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Prepared by: Technical Department

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.*