

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: HC500
Product Name: Hydro Clean 500
Company Name: Shepard Bros. Inc.
503 S. Cypress St.
La Habra, CA 90631
Phone Number: +1 (562)697-1366
Web site address: www.shepardbros.com
Emergency Contact: CHEMTREC +1 (800)424-9300

Product Category:

2. HAZARDS IDENTIFICATION

Skin Corrosion/Irritation, Category 1A



GHS Signal Word: **Danger**
GHS Hazard Phrases: H314 - Causes severe skin burns and eye damage.
GHS Precautionary Phrases: P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
GHS Response Phrases: P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. P363 - Wash contaminated clothing before reuse.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor/physician.
P321 - Specific treatment see Section 4 reference to supplemental first aid instruction - if immediate measures are required.
GHS Storage and Disposal Phrases: P501 - Dispose of contents and containers in accordance with local, regional, national, and international regulations.
Other Hazards: Harmful to aquatic life.
Potential Health Effects (Acute and Chronic): Chronic: Effects may be delayed. No information found.
Inhalation: Harmful if inhaled. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. Irritation may lead to chemical pneumonitis and pulmonary edema. Causes chemical burns to the respiratory tract.
Skin Contact: Causes severe skin irritation. Can cause severe injury (reddening and swelling). May cause deep, penetrating ulcers of the skin. Can cause chemical burn.
Eye Contact: Causes redness and pain. Causes severe eye burns. Causes serious eye damage. May cause irreversible eye injury. Contact may cause ulceration of the conjunctiva and cornea. Eye damage may be delayed.
Ingestion: Harmful if swallowed. Can burn mouth, throat and stomach. Causes gastrointestinal tract burns. May cause severe and permanent damage to the digestive tract. May cause perforation of the digestive tract. May cause systemic effects.



3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
1310-58-3	Potassium hydroxide	10.0 -15.0 %
7681-52-9	Sodium hypochlorite	1.0 -2.0 %

4. FIRST AID MEASURES

Emergency and First Aid

Procedures:

- In Case of Inhalation:** Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. Get medical attention immediately.
- In Case of Skin Contact:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Gently wash with plenty of soap and water. Wash contaminated clothing separately before reuse. Get medical advice/attention.
- In Case of Eye Contact:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do after 5 minutes and continue rinsing for an additional 15 minutes. Get immediate medical advice/attention.
- In Case of Ingestion:** Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.
- Note to Physician:** Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

5. FIRE FIGHTING MEASURES

- Flash Pt:** NA
- Explosive Limits:** LEL: No data. UEL: No data.
- Autoignition Pt:** No data.
- Suitable Extinguishing Media:** Use foam, carbon dioxide, or water spray when fighting fires involving this material.
- Unsuitable Extinguishing Media:** Do not use dry chemical extinguisher containing ammonium compounds.
- Fire Fighting Instructions:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH approved (or equivalent), and full protective gear. Use water spray to keep fire-exposed containers cool. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Wear appropriate protective clothing to prevent contact with skin and eyes.
- Flammable Properties and Hazards:** Contact of this product with many "active" metals such as aluminum, copper and zinc, can cause formation of flammable hydrogen gas. High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, and oxides of: chlorine, hydrogen chloride, potassium.
- Hazardous Combustion Products:** Contact of this product with many "active" metals such as aluminum, copper and zinc, can cause formation of flammable hydrogen gas.



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6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures:	Use proper personal protective equipment as indicated in Section 8.
Environmental Precautions:	Do not let product enter drains, sewers, watersheds or water systems.
Steps To Be Taken In Case Material Is Released Or Spilled:	Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Provide ventilation. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Contain spill using an inert diking material. Transfer material into an approved container for possible recovery and reuse or for disposal. Do not contaminate spill material with any organic materials, ammonia, ammonium salts or urea. Do not let this chemical enter the environment.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:	Read label before use. Use with adequate ventilation. Handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Discard contaminated shoes. Keep away from heat, sparks and flame.
Precautions To Be Taken in Storing:	Store in a cool, dry, well-ventilated area away from incompatible substances. Keep container closed when not in use. Store in a tightly closed container. Protect containers against damage. Store away from heat. Store away from sparks, flames. Protect from sunlight.
Other Precautions:	Handle in accordance with good industrial hygiene and safety practices. Keep out of reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
1310-58-3	Potassium hydroxide	PEL: 2 mg/m ³	CEIL: 2 mg/m ³	No data.
7681-52-9	Sodium hypochlorite	PEL: 0.5 ppm as Cl ₂ STEL: 1 ppm as Cl ₂	TLV: 0.5 ppm as Cl ₂ STEL: 1 ppm as Cl ₂	No data.

CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
1310-58-3	Potassium hydroxide	NIOSH	TWA: 1 mg/m ³ CEIL: 2 mg/m ³	

Respiratory Equipment (Specify Type):	Avoid breathing vapors and mists. If ventilation is not sufficient to effectively prevent buildup of vapors or mists and the exposure limit is exceeded, use a NIOSH/MSHA approved respirator.
Eye Protection:	Wear chemical splash goggles and a full-face shield where there is potential for eye contact.
Protective Gloves:	Wear appropriate protective gloves to prevent skin exposure. Rubber or neoprene gloves.
Other Protective Clothing:	Wear appropriate protective clothing to prevent skin exposure. Chemical resistant boots. Chemical resistant apron.
Engineering Controls (Ventilation etc.):	Use adequate general or local exhaust ventilation to minimize exposure levels. Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	[] Gas [X] Liquid [] Solid
Appearance and Odor:	Appearance: Clear. Yellowish. Liquid. Odor: chlorine-like.
pH:	12.5 - (1% soln) at 25.0 C
Melting Point:	< 32.00 F
Boiling Point:	> 212.00 F
Flash Pt:	NA
Evaporation Rate:	NA
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: No data. UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	NA
Vapor Density (vs. Air = 1):	NA
Specific Gravity (Water = 1):	~ 1.21
Density:	NA
Bulk density:	NA
Solubility in Water:	Complete
Saturated Vapor Concentration:	NA
Octanol/Water Partition Coefficient:	No data.
Percent Volatile:	NA
VOC / Volume:	NA
HAP / Volume:	NA
Autoignition Pt:	No data.
Decomposition Temperature:	NA
Viscosity:	NA
Particle Size:	NA
Heat Value:	NA
Corrosion Rate:	NA
Molecular Formula & Weight:	PROPRIETARY 0.0

10. STABILITY AND REACTIVITY

Reactivity:	Contact of this product with many "active" metals such as aluminum, copper and zinc, can cause formation of flammable hydrogen gas.
Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability:	Incompatible materials, Excess heat.
Incompatibility - Materials To Avoid:	Strong acids, Contact of this product with many "active" metals such as aluminum, copper and zinc, can cause formation of flammable hydrogen gas.
Hazardous Decomposition or Byproducts:	High temperatures and flames may produce: Toxic chlorine, Carbon monoxide, hydrogen chloride, Oxides of potassium, oxides of phosphorus, sodium oxide. Contact of this product with many "active" metals such as aluminum, copper and zinc, can cause formation of flammable hydrogen gas.
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.



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11. TOXICOLOGICAL INFORMATION

Toxicological Information: Epidemiology: No information available.
 Teratogenicity: No information available.
 Reproductive Effects: No information available.
 Mutagenicity: No information available.
 Neurotoxicity: No information available. No information available.
 Teratogenicity: No information available.
 Reproductive Effects: No data available.
 Mutagenicity: No information available.
 Neurotoxicity: No data available.
 Other Studies: CAS# 1310-58-3:
 Acute toxicity, LD50, Oral, Rat, 273 mg/kg

Other Studies: CAS# 7681-52-9:
 Acute toxicity, LD50, Oral, Mouse, 5800 mg/kg

Irritation or Corrosion: Other Studies: CAS# 1310-58-3:
 Standard Draize Test, Skin, Species: Rabbit, 50.0 mg, 24H

Other Studies: CAS# 7681-52-9:
 Standard Draize Test, Eyes, Species: Rabbit, 1.310 mg

Carcinogenicity/Other Information: CAS# 1310-58-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
 CAS# 7681-52-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

12. ECOLOGICAL INFORMATION

General Ecological Information: Environmental: No information found.
 Physical: No information found.
 Other: Do not empty into drains.

Results of PBT and vPvB assessment: Other Studies: CAS# 1310-58-3:
 LC50, Western Mosquitofish (Gambusia affinis), adult(s), 80000 ug/L, 96H, Mortality

Other Studies: CAS# 7681-52-9:
 LC50, Rainbow trout (Oncorhynchus mykiss), 59.00 ug/L, 96H
 LC50, Water Flea (Daphnia magna), 32.00 ug/L, 48H
 LC50, Bleak (Alburnus alburnus), 30000 - 35000 ug/L, 96H

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Observe all federal, state, and local environmental regulations.
 RCRA P-Series: None listed.
 RCRA U-Series: None listed.

14. TRANSPORT INFORMATION

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LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Corrosive Liquid, Basic, Inorganic, N.O.S. (Potassium Hydroxide, Sodium Hypochlorite)
DOT Hazard Class: 8 CORROSIVE
UN/NA Number: UN3266 **Packing Group:** II



15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
1310-58-3	Potassium hydroxide	No	Yes 1000 LB	No
7681-52-9	Sodium hypochlorite	No	Yes 100 LB	No

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

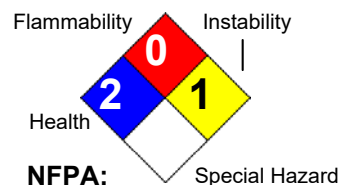
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Explosive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Acute toxicity (any route of exposure)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Flammable (gases, aerosols, liquid, or solid)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Skin Corrosion or Irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Oxidizer (liquid, solid or gas)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Serious eye damage or eye irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Self-reactive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Respiratory or Skin Sensitization
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pyrophoric (liquid or solid)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Germ cell mutagenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pyrophoric gas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Carcinogenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Self-heating	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Reproductive toxicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Organic peroxide	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Specific target organ toxicity (single or repeated exposure)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Corrosive to metal	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Aspiration Hazard
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Gas under pressure (compressed gas)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Simple Asphyxiant
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	In contact with water emits flammable gas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(Health) Hazard Not Otherwise Classified (HNOC)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Combustible Dust		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Physical) Hazard Not Otherwise Classified (HNOC)		

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
1310-58-3	Potassium hydroxide	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8
7681-52-9	Sodium hypochlorite	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8

16. OTHER INFORMATION

Revision Date: 11/06/2020

Hazard Rating System:



Additional Information About No data available.

This Product:

Company Policy or Disclaimer:

Information presented herein is believed to be accurate and reliable to the best of our knowledge. However, we make no warranty or merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process. Users should make their own investigations to determine the suitability of the information for their particular purposes.