1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: SH201

Product Name: Shear 201

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

Emergency Phone: +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: 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.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.

Potential Health Effects (Acute and Chronic): Chronic: Prolonged or repeated skin contact may cause dermatitis. Effects may be delayed.

Inhalation: Causes chemical burns to the respiratory tract. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. Irritation may lead to chemical pneumonitis and pulmonary edema.

Skin Contact: Causes skin burns. May cause deep, penetrating ulcers of the skin. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color. Corrosive, causes permanent skin damage (scarring).

Eye Contact: Corrosive. Will cause eye burns and permanent tissue damage. May cause irreversible eye injury.

Ingestion: May cause corrosion and permanent tissue destruction of the esophagus and digestive tract. Causes gastrointestinal tract burns. May cause perforation of the digestive tract. Causes severe pain, nausea, vomiting, diarrhea, and shock. May cause systemic effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
1310-73-2	Sodium hydroxide	40.0 -50.0 %

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 medical attention if irritation persists.

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: NP Method Used: Estimate

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: NP

Suitable Extinguishing Media: Foam, CO_2, water fog, sand/earth.

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. Use water with caution and in flooding amounts. Contact of this product with many "active" metals such as aluminum, copper and zinc, can cause formation of flammable hydrogen gas.

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.

Hazardous Combustion Products: High temperatures and flames may produce: Carbon monoxide, Carbon dioxide, oxides of phosphorus, Contact of this product with many "active" metals such as aluminum, copper and zinc, can cause formation of flammable hydrogen gas.

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 let this chemical enter the environment.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling: Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

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
1310-73-2	Sodium hydroxide	PEL: 2 mg/m3	CEIL: 2 mg/m3	No data.

CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
1310-73-2	Sodium hydroxide	NIOSH	CEIL: 2 mg/m3	

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 apron. Rubber or neoprene boots.

Engineering Controls (Ventilation etc.): Use adequate general or local exhaust ventilation to minimize exposure levels. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Appearance and Odor:	Appearance: Transparent. colorless. Liquid. Odor: Odorless.
pH:	12.8-13.1 - (1% soln) at 25.0 C
Melting Point:	< 32.00 F
Boiling Point:	NA
Flash Pt:	NP Method Used: Estimate
Evaporation Rate:	No data.
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: No data. UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	No data.
Vapor Density (vs. Air = 1):	No data.
Specific Gravity (Water = 1):	1.49
Solubility in Water:	Complete
Octanol/Water Partition Coefficient:	No data.
Autoignition Pt:	NP
Decomposition Temperature:	No data.
Viscosity:	No data.

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:	Excess heat, Incompatible materials.
Incompatibility - Materials To Avoid:	Flammable liquids, Acids, organic halogens. 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: Carbon monoxide, Carbon dioxide, oxides of phosphorus, 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.

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 found.
Teratogenicity: No information available.
Reproductive Effects: No information available.
Mutagenicity: See actual entry in RTECS for complete information.
Neurotoxicity: No information available.
Other Studies: CAS# 1310-73-2
Acute toxicity, LDLO, Oral, Species: Rabbit, 500.0 mg/kg.

Irritation or Corrosion:
Other Studies: CAS# 1310-73-2
Standard Draize Test, Eyes, Species:Rabbit, 50.0 ug, 24H
Standard Draize Test, Skin, Species: Rabbit, 500 mg, 24H.

Carcinogenicity/Other Information:
CAS# 1310-73-2: 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 available.
Physical: No information available.
Other: Do not empty into drains.

Results of PBT and vPvB assessment:
Other Studies: CAS# 1310-73-2:
LC50, Common Shrimp, Sand Shrimp (Crangon crangon), adult(s), 33000 - 100000 ug/L, 48H
LC50, Western Mosquitofish (Gambusia affinis), adult(s), 125000 ug/L, 96H
LC50, Cockle (Cerastoderma edule), adult(s) 330000 - 1000000 ug/L, 48H
LC50, Guppy (Poecilia reticulata)}, young organism(s), 196.0 mg/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

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Sodium Hydroxide Solution.
DOT Hazard Class: 8 CORROSIVE
UN/NA Number: UN1824 **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)
1310-73-2	Sodium hydroxide	No	Yes 1000 LB	No

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

[ ] Yes [X] No Explosive
[ ] Yes [X] No Flammable (gases, aerosols, liquid, or solid)
[ ] Yes [X] No Oxidizer (liquid, solid or gas)
[ ] Yes [X] No Self-reactive
[ ] Yes [X] No Pyrophoric (liquid or solid)
[ ] Yes [X] No Pyrophoric gas
[ ] Yes [X] No Self-heating
[ ] Yes [X] No Organic peroxide
[ ] Yes [X] No Corrosive to metal
[ ] Yes [X] No Gas under pressure (compressed gas)
[ ] Yes [X] No In contact with water emits flammable gas
[ ] Yes [X] No Combustible Dust
[ ] Yes [X] No (Physical) Hazard Not Otherwise Classified (HNOC)

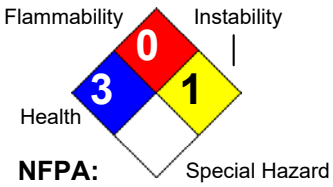
[ ] Yes [X] No Acute toxicity (any route of exposure)
[X] Yes [ ] No Skin Corrosion or Irritation
[ ] Yes [X] No Serious eye damage or eye irritation
[ ] Yes [X] No Respiratory or Skin Sensitization
[ ] Yes [X] No Germ cell mutagenicity
[ ] Yes [X] No Carcinogenicity
[ ] Yes [X] No Reproductive toxicity
[ ] Yes [X] No Specific target organ toxicity (single or repeated exposure)
[ ] Yes [X] No Aspiration Hazard
[ ] Yes [X] No Simple Asphyxiant
[ ] Yes [X] No (Health) Hazard Not Otherwise Classified (HNOC)

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
1310-73-2	Sodium hydroxide	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: TAC: Cat. IIb, Title 8

16. OTHER INFORMATION

Revision Date: 11/06/2020

Hazard Rating System:



NFPA:

Additional Information About This Product: No data available.

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