1. PRODUCT AND COMPANY IDENTIFICATION

Product Name SHINY-SIDE
Recommended use Cleaning agent

Information on Manufacturer
CHEMSEARCH DIV. OF NCH CORP.
BOX 152170
IRVING, TX 75015

Product Code 0505
Chemical nature Alkaline aqueous solution

Emergency Telephone Number
CHEMTREC 1-800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview

DANGER
Corrosive
Causes skin and eye burns
Harmful if inhaled and may cause delayed lung injury
Harmful or fatal if swallowed

Color Red **Physical State** Liquid **Odor** Odorless

Potential Health Effects

Principle Route of Exposure Skin contact, Eye contact, Inhalation, (mist).

Primary Routes of Entry None known

Acute Effects

Eyes Corrosive to the eyes and may cause severe damage including blindness.

Skin Causes skin burns.

Inhalation Harmful by inhalation. Causes burns.

Ingestion If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. May be fatal if swallowed.

Chronic Toxicity Inhaled corrosive substances can lead to a toxic edema of the lungs.

Target Organ Effects Eyes, Skin, Respiratory system.

Aggravated Medical Conditions Skin disorders, Respiratory disorders.

Potential Environmental Effects See Section 12 for additional Ecological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
Sodium hydroxide	1310-73-2
Tetrasodium ethylenediaminetetraacetate	64-02-8

4. FIRST AID MEASURES

General Advice Do not get in eyes, on skin or on clothing. Do not breathe vapors or spray mist.

Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention immediately.

Skin Contact Remove immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.

Inhalation Move to fresh air. In case of shortness of breath, give oxygen. If breathing has stopped, apply artificial respiration. Get medical attention immediately.

Ingestion Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.

Notes to Physician The product causes burns of eyes, skin and mucous membranes. Control of circulatory system, shock therapy if needed.

5. FIRE-FIGHTING MEASURES

Flash Point > 201 °F / > 94 °C **Method** Seta closed cup

Autoignition Temperature No information available.

Flammability Limits in Air % Hydrogen, by reaction with metals. **Upper** 75 **Lower** 4

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO2). Foam. Alcohol-resistant foam. Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical

Contact with metals may evolve flammable hydrogen gas. Material can create slippery conditions.

Protective Equipment and Precautions for Firefighters

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

NFPA **Health** 3 **Flammability** 1 **Instability** 0

HMIS **Health** 3 **Flammability** 1 **Instability** 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Wear protective gloves/clothing. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.

Environmental Precautions Do not flush into surface water or sanitary sewer system.

Methods for Containment Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Methods for Cleaning Up Pick up and transfer to properly labeled containers.

Neutralizing Agent Acetic acid, diluted.

7. HANDLING AND STORAGE

Handling Do not get in eyes, on skin or on clothing. Do not breathe vapors or spray mist.

Storage Keep container tightly closed in a dry and well-ventilated place. Metal containers must be lined. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.

Storage Temperature **Minimum** 35 °F / 2 °C **Maximum** 110 °F / 43 °C

Storage Conditions **Indoor** X **Outdoor** **Heated** **Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Sodium hydroxide	Ceiling: 2 mg/m^3	TWA: 2 mg/m^3	IDLH: 10 mg/m^3 Ceiling: 2 mg/m^3
Tetrasodium ethylenediaminetetraacetate	No data available	No data available	No data available

Engineering Measures Use with local exhaust ventilation. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/Face Protection Tightly fitting safety goggles. Face-shield.

Skin Protection Wear suitable protective clothing, Impervious gloves.

Respiratory Protection In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General Hygiene Considerations Wear protective gloves/clothing. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	**Viscosity**	Non viscous
Color	Red	**Odor**	Odorless
Appearance	Transparent	**pH**	13.3
Specific Gravity	1.175	**Evaporation Rate**	0.6 (Butyl acetate=1)
Percent Volatile (Volume)	81.6	**VOC Content (%)**	0
Vapor Pressure	14.52 mmHg @ 70°F	**Vapor Density**	0.6
Solubility	Completely soluble	**Boiling Point/Range**	> 212 °F / 100 °C

10. STABILITY AND REACTIVITY

Chemical Stability Stable. Hazardous polymerization does not occur.

Conditions to Avoid None known

Incompatible Products Oxidizing agents, Acids, Aldehydes, Halogenated hydrocarbon, Acid anhydrides, Organic materials, Contact with metals liberates hydrogen gas.

Hazardous Decomposition Products Carbon oxides, Nitrogen oxides (NOx), Sulfur oxides, Sodium oxides, Ammonia, Hydrogen, by reaction with metals.

Possibility of Hazardous Reactions None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information No information available.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Sodium hydroxide	no data available	= 1350 mg/kg (Rabbit)	no data available	no data available	no data available
Tetrasodium ethylenediaminetetraacetate	= 10 g/kg (Rat)	no data available	no data available	no data available	no data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Sodium hydroxide	no data available	no data available	no data available	no data available	eyes, respiratory system, skin
Tetrasodium ethylenediaminetetraacetate	no data available	no data available	no data available	no data available	no data available

Carcinogenicity There are no known carcinogenic chemicals in this product.

Component	ACGIH	IARC	NTP	OSHA	Other
Sodium hydroxide	not applicable	not applicable	not applicable	not applicable	not applicable
Tetrasodium ethylenediaminetetraacetate	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Sodium hydroxide	no data available	LC50 = 45.4 mg/L Oncorhynchus mykiss 96 h	no data available	no data available	N/A
Tetrasodium ethylenediaminetetraacetate	EC50 = 1.01 mg/L Desmodesmus subspicatus 72 h	LC50 = 41 mg/L Lepomis macrochirus 96 h LC50 = 59.8 mg/L Pimephales promelas 96 h	no data available	= 610 mg/L 24 h	N/A

Persistence and Degradability No information available.
Bioaccumulation No information available.
Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of in accordance with local regulations.
Container Disposal Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Caustic alkali liquids, n.o.s.
Hazard Class 8
UN-No UN1719
Packing Group III
Description Caustic alkali liquids, n.o.s.(Sodium hydroxide),8,UN1719,PG III

TDG

Proper shipping name Caustic alkali liquid, n.o.s.
Hazard Class 8
UN-No UN1719
Packing Group III
Description CAUSTIC ALKALI LIQUID, N.O.S.(Sodium hydroxide),8,UN1719,PG III

ICAO

UN-No UN1719
Proper Shipping Name Caustic alkali liquid, n.o.s.*
Hazard Class 8
Packing Group III
Shipping Description Caustic alkali liquid, n.o.s., (Sodium hydroxide),8,UN1719,PG III

IATA

UN-No UN1719
Proper Shipping Name Caustic alkali liquid, n.o.s.*
Hazard Class 8
Packing Group III
ERG Code 8L
Shipping Description UN1719,Caustic alkali liquid, n.o.s.,(Sodium hydroxide),8,PG III

IMDG/IMO

Proper Shipping Name Caustic alkali liquid, n.o.s.
Hazard Class 8
UN-No UN1719
Packing Group III
EmS No. F-A, S-B
Shipping Description UN1719, Caustic alkali liquid, n.o.s.(Sodium hydroxide),8,PG III

15. REGULATORY INFORMATION

Inventories
TSCA Complies
DSL Complies

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	No	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Sodium hydroxide	Not applicable	Not applicable
Tetrasodium ethylenediaminetetraacetate	Not applicable	Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class
E Corrosive material

16. OTHER INFORMATION

Prepared By	Mike McDowell
Supercedes Date	09/03/2008
Issuing Date	03/23/2011
Reason for Revision	No information available.
Glossary	No information available.
List of References.	No information available.

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