

SAFETY DATA SHEET

Revision Date 03-Aug-2015 Version 1

1. IDENTIFICATION

Product Name Sodium Hydroxide Solution, 10% w/v

Product Code 12940

Recommended Use For laboratory, scientific, R&D or manufacturing use.

Company E K Industries, Inc.

1403 Herkimer St. Joliet, IL 60432 Tel. (800) 283-4244

Emergency Telephone Call CHEMTREC 1-800-424-9300 (EKI CCN 7453)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

Label elements

Signal word

Danger

Hazard statements

Causes severe skin burns and eye damage.



Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician.

IF IN EYES: 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.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON

CENTER or doctor/physician.

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Water	7732-18-5	~90
Sodium hydroxide	1310-73-2	10

4. FIRST AID MEASURES

Description of first aid measures

Eye contact Immediately flush with plenty of water for at least 15 minutes, separating eyelids

occasionally. Remove contact lenses if present. Get immediate medical attention.

Skin contact Wash thoroughly with soap and water while removing contaminated garments. Get medical

attention if irritation develops.

Inhalation Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion Rinse mouth and drink several glasses of water. Contact a physician or poison control

center if symptoms develop.

Most important symptoms and effects, both acute and delayed

Symptoms Causes severe skin burns and eye damage.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Hazardous combustion products

Sodium oxides.

Protective equipment and precautions for firefighters

Firefighters should wear self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive pressure mode.

NFPA Health hazards 2 Flammability 0 Instability 0 Physical and Chemical Properties -

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

confined areas.

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Neutralize base prior to using absorbent material. Absorb spill with inert material, scoop up

and containerize for disposal.

7. HANDLING AND STORAGE

Handle in accordance with good industrial hygiene and safety practice.

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials Acids. Metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	IDLH: 10 mg/m ³
1310-73-2		(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³

Appropriate engineering controls

Engineering Controls Emergency showers, eyewash stations, ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Skin and body protection Wear protective gloves and protective clothing.

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

Appearance Clear, colorless
Odor Odorless

Odor threshold No information available

pH >12

Melting point / freezing point Boiling point / boiling range

Flash point
Evaporation rate
Flammability (solid, gas)
Flammability Limit in Air
Upper flammability limit:

No information available No information available No information available

No information available No information available

No information available

Lower flammability limit:

Vapor pressure

Vapor density

Relative density

No information available
No information available
No information available
No information available

Water solubility Soluble in water

Solubility in other solvents
Partition coefficient
Autoignition temperature
Decomposition temperature
Kinematic viscosity
No information available
No information available
No information available
No information available

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions None under normal processing.

Conditions to avoid Extremes of temperature and direct sunlight.

Incompatible materials Acids. Metals.

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating and toxic gases and vapors. Sodium

oxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation No data available.

Eve contact Risk of serious damage to eyes.

Skin contact May cause burns.

Ingestion May be harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium hydroxide	-	= 1350 mg/kg (Rabbit)	-
1310-73-2			

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Causes severe burns.

Serious eye damage/eye irritation Risk of serious damage to eyes.

IrritationIrritating to eyes and skin.SensitizationNo information available.Germ cell mutagenicityNo information available.

Carcinogenicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Sodium hydroxide	-	45.4: 96 h Oncorhynchus mykiss	-
1310-73-2		mg/L LC50 static	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container. Emptied containers may contain residue. Continue to follow label

warnings after container is emptied.

Chemical Name	California Hazardous Waste Status
Sodium hydroxide	Toxic
1310-73-2	Corrosive

14. TRANSPORT INFORMATION

Transportation information is provided as a general reference only and may not be applicable in all situations. This information applies to non-bulk shipments only. Per 49 CFR §173.22, it is the shipper's responsibility to ensure that all materials are properly packaged, classified and labeled prior to shipment.

DOT

UN/ID no. 1824

Proper shipping name Sodium hydroxide, solution

Hazard Class 8
Packing Group

<u>IATA</u>

UN/ID no. 1824

Proper shipping name Sodium hydroxide, solution

Hazard Class 8
Packing Group ||

15. REGULATORY INFORMATION

US 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 Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard Yes
Chronic Health Hazard No
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21

and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hydroxide 1310-73-2	1000 lb	-	-	Х

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sodium hydroxide	1000 lb	-	RQ 1000 lb final RQ
1310-73-2			RQ 454 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium hydroxide	X	X	X
1310-73-2			

16. OTHER INFORMATION

Prepared By EKI Regulatory Affairs (Email: reg@eki-chem.com)

Revision Date 03-Aug-2015

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End of Safety Data Sheet