1. Product and Company Identification

Product Code: 00052

Product Name: 35

Company Name: Heat Power Engineering
702 Incentive Drive
Fort Wayne, IN 46825

Emergency Contact: Infotrac (800)535-5053

Information: (260)497-9500

2. Hazards Identification

Skin Corrosion/Irritation, Category 1A
Serious Eye Damage/Eye Irritation, Category 1
Aquatic Toxicity (Acute), Category 3
Corrosive To Metals, Category 1



GHS Signal Word: **Danger**

GHS Hazard Phrases:
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.
H402 - Harmful to aquatic life.
H290 - May be corrosive to metals.

GHS Precaution 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.
P273 - Avoid release to the environment.
P234 - Keep only in original container.

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. P315 - Get immediate medical advice/attention.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P315 - Get immediate medical advice/attention.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P315 - Get immediate medical advice/attention.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P313 - Get medical advice/attention.

GHS Storage and Disposal Phrases:
P403+235 - Store in cool/well-ventilated place. P405 - Store locked up.
P501 - Dispose of contents/container to ...

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

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

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. May be harmful if absorbed through the skin.

Eye Contact: Causes eye burns. May cause chemical conjunctivitis and corneal damage.

Ingestion: May cause severe and permanent damage to the 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	35.0 %

4. First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention.

In Case of Skin Contact: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse. Wash off with soap and plenty of water.

In Case of Eye Contact: In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

In Case of Ingestion: If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person. Rinse mouth with water.

Note to Physician: Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Pt: No data.

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

Autoignition Pt: No data.

Suitable Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire. Do NOT get water inside containers. Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

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 with moisture or water may generate sufficient heat to ignite nearby combustible materials. Contact with metals may evolve flammable hydrogen gas.

Flammable Properties and Hazards: No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation. Do not get water on spilled substances or inside containers. Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.
Personal precautions. Avoid breathing vapors, mist or gas.
Environmental precautions. Do not let product enter drains.

7. Handling and Storage

Precautions To Be Taken in Handling: Wash thoroughly after handling. Do not allow water to get into the container because of violent reaction. Keep container tightly closed. Avoid ingestion and inhalation. Discard contaminated shoes. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation.

Precautions To Be Taken in Storing: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from metals. Keep away from acids. Store protected from moisture. Containers must be tightly closed to prevent the conversion of NaOH to sodium carbonate by the CO2 in air.

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.

Respiratory Equipment (Specify Type): A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye Protection: Wear chemical splash goggles.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure. Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Engineering Controls (Ventilation etc.): Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Work/Hygienic/Maintenance Practices: General industrial hygiene practice.

9. Physical and Chemical Properties

Physical States: [ ] Gas [X] Liquid [ ] Solid

Appearance and Odor: Brownish.
Odorless.

Melting Point: No data.

Boiling Point: No data.

Autoignition Pt: No data.

Flash Pt: No data.

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

Specific Gravity (Water = 1): 1.20 - 1.40

Vapor Pressure (vs. Air or mm Hg):	No data.
Vapor Density (vs. Air = 1):	No data.
Evaporation Rate:	No data.
Solubility in Water:	No data.
pH:	> 13
Percent Volatile:	No data.

10. Stability and Reactivity

Stability:	Unstable [ ] Stable [X]
Conditions To Avoid - Instability:	Moisture, contact with water.
Incompatibility - Materials To Avoid:	Water, Metals. acids, Aluminum, Zinc, gelatin, nitromethane, leather, flammable liquids, organic halogens. Strong oxidizing agents.
Hazardous Decomposition Or Byproducts:	Toxic fumes of sodium oxide, formed under fire conditions. Carbon oxides, Sulphur oxides.
Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. Toxicological Information

Toxicological Information:

Teratogenicity: No data available. Epidemiology: No data available.
Reproductive Effects: No data available.
Mutagenicity: No data available. Neurotoxicity: No data available.
CAS# 1310-73-2:
Acute toxicity, LD50, Intraperitoneal, Mouse, 40.00 MG/KG; Comptes Rendus Hebdomadaires des Seances, Academie des Sciences., For publisher information, see CRASEV, Paris France, Vol/p/yr: 257,791, 1963

Acute toxicity, LDLO, Oral, Species: Rabbit, 500.0 MG/KG; Naunyn-Schmiedeberg's Archiv fuer Experimentelle Pathologie und Pharmakologie., Vol/p/yr: 184,587, 1937

Standard Draize Test, Skin, Species: Rabbit, 500.0 MG, 24 H; "Sbornik Vysledku Toxixologickeho Vysetreni Latek A Pripravku," , Institut Pro Vychovu Vedoucicn P, Marhold, J.V., Institut Pro Vychovu Vedoucicn, Pracovniku Chemickeho, Prumyclu Praha Czechoslovakia, Vol/p/yr: -,7, 1972

Standard Draize Test, Eyes, Species: Rabbit, 400.0 UG.
Results:
Behavioral: Convulsions or effect on seizure threshold.
Lungs, Thorax, or Respiration:Respiratory depression.
Lungs, Thorax, or Respiration:Other changes.
- Oyo Yakuri. Pharmacometrics., Oyo Yakuri Kenkyukai, CPO Box 180, Sendai 980-91 Japan, Vol/p/yr: 26,627, 1983

Carcinogenicity/Other Information:	CAS# 1310-73-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Carcinogenicity.
Carcinogenicity:	NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

General Ecological Information:

CAS# 1310-73-2:
Effective concentration to {0} % of test organisms, Water Flea (Daphnia magna), 156000. UG/L, 48 H, Intoxication,; The Toxicity Thresholds of Various Sodium Salts Determined by the Use of Daphnia magna, Anderson, B.G., 1946

LC50, Western Mosquitofish (Gambusia affinis), adult(s), 125000. UG/L, 24 H, Mortality, Water temperature: 22.00 C (71.6 F) - 24.00 C (75.2 F) C, pH: 9.00; Toxicity to Gambusia affinis of Certain Pure Chemicals in Turbid Waters, Wallen, I.E., W.C. Greer, and R. Lasater, 1957

LC50, Goldfish (Carassius auratus), 160000. UG/L, 24 H, Mortality; A Simplified Bioassay Using Finfish for Estimating Potential Spill Damage, Jensen, R.A., 1978

Effective concentration to 50% of test organisms., Water Flea (Ceriodaphnia dubia), neonate, 40.38 MG/L, 48 H, Intoxication,, Water temperature: 23.00 C (73.4 F) C; Toxicity of Laundry Detergent Components to a Freshwater Cladoceran and Their Contribution to Detergent Toxicity, Warne, M.S.J., and A.D. Schifko, 1999

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.

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



AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Sodium hydroxide solution. mixture.

15. Regulatory Information

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

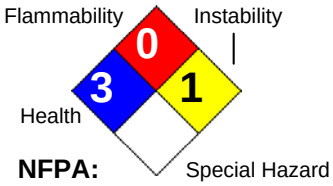
CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
1310-73-2	Sodium hydroxide	No	Yes 1000 LB	No

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:	[X] Yes [ ] No	Acute (immediate) Health Hazard
	[X] Yes [ ] No	Chronic (delayed) Health Hazard
	[ ] Yes [X] No	Fire Hazard
	[ ] Yes [X] No	Sudden Release of Pressure Hazard
	[ ] Yes [X] No	Reactive Hazard

16. Other Information

Revision Date: 12/09/2025

Hazard Rating System:



Additional Information About This Product: No data available.

Company Policy or Disclaimer: While the information and recommendations set forth herein are believed to be accurate as of the date thereof, HEAT POWER ENGINEERING CO. MAKES NO WARRANTY WITH RESPECT HERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.