QuicKleen Oven & Grill Cleaner

Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200

Revision Date: 11/20/15

Section 1: Identification

Product Identifier:

Product name: QuicKleen Oven & Grill Cleaner
Product #: JLQKGC0401

Other means of Identification:

Chemical name: Sodium Hydroxide Solution
CAS-No: 1310-73-2

Recommended Use:

Oven and Grill Cleaner is an all purpose oven and grill cleaner.

Chemical Manufacturer:

Oklahoma Correctional Industries
3402 N. Martin Luther King Ave.
Oklahoma City, Oklahoma 73111
Phone: (405) 964-7220
Fax: (405) 964-7222

Emergency telephone number:

For emergency health, safety, and environmental information: call 1-800-522-3565

Section 2: Hazard(s) Identification

Warning label items including precautionary statement:

Pictogram:

Signal words: **DANGER!**

Hazard statement:
H302: Harmful if swallowed
H304: May be fatal if swallowed and enters airways
H315: Causes skin irritation
H319: Causes serious eye irritation

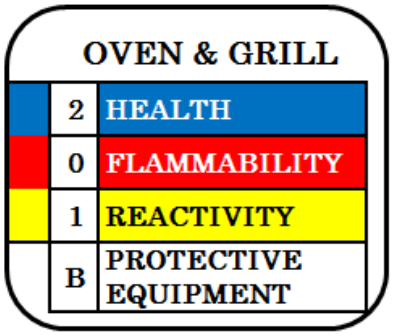
Precautionary statement:

Prevention:
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink, or smoke when using this product.
P271: Use only outdoors or in a well ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P302+P352: If on skin: Wash with plenty of soap and water.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P363: Wash contaminated clothing before reuse.
P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P301+P310: If swallowed: Immediately call a poison center or doctor/physician.
P331: Do not induce vomiting.

Storage:	P403+P235: Store in a well ventilated place. Keep cool. P405: Store locked up.
Disposal:	P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazards not otherwise classified (HNOC)



Emergency Overview: Odorless, clear, non-volatile liquid. EXTREMELY CORROSIVE! Causes server burns on contact. Can cause blindness, permanent scarring and death. Aerosols can cause lung injury-effects may be delayed. Highly reactive. Can react violently with water and numerous commonly encountered materials, generating enough heat to ignite nearby combustible materials. Contact with many organic and inorganic chemicals may cause fire or explosion. Reacts with some metals to liberate hydrogen gas, which can form explosive mixtures with air. Will not burn. Harmful to aquatic life. Read the entire SDS for a more thorough evaluation of the hazards.

Section 3: Composition/Information on Ingredients

Hazardous Components

Chemical Name *	CAS-No
Sodium Hydroxide Solution	1310-73-2

*** The exact percentage (concentration) of composition has been withheld as a trade secret**

Section 4: First-aid Measures

The following procedures are recommended as emergency first aid only. They are not intended to replace or supplant the treatment advice of a physician or other authorized health care specialist.

Inhalation

Effects	Sodium hydroxide does not readily form a vapor and inhalation exposure is likely to occur as an aerosol. Due to its corrosive nature, sodium hydroxide aerosols could cause pulmonary edema (severe, life-threatening lung injury). The development of pulmonary edema may be delayed up to 48 hours after exposure. The early symptoms of pulmonary edema include shortness of breath and tightness in the chest.
First Aid	Move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. Give artificial respiration ONLY if breathing has stopped. Do not use mouth-to-mouth method if victim ingested or inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Give Cardiopulmonary Resuscitation (CPR) only if there is no pulse and no breathing. Obtain medical attention IMMEDIATLEY. Symptoms of pulmonary edema can be delayed up to 48 hours after exposure.

Skin Contact:

Effects	Extremely Corrosive! Sodium hydroxide is capable of causing severe burns with deep ulceration and permanent scaring. It can penetrate to deeper layers of skin and corrosion will continue until

removed. The severity of injury depends on the concentration (solution) and the duration of exposure. Burns may not be immediately painful; onset of pain may be delayed minutes to hours. Several human studies and case reports describe the corrosive effects of sodium hydroxide. A 4 % solution of sodium hydroxide, applied to a volunteer's arm for 15 to 180 minutes caused damage, which progressed from destruction of the cells of the outer layer of the skin within 15 minutes to total destruction of all layers of the skin in 60 minutes. Solutions as weak as 0.12% have damaged healthy skin within 1 hour.

First Aid: Immediately flush skin with lukewarm water for at least 20 minutes, and up to 60 minutes if necessary. Under lukewarm water, remove contaminated clothing, jewelry, and shoes. If irritation persists, repeat flushing. Obtain medical attention immediately. Discard contaminated clothing and shoes in a manner, which limits further exposure.

Eye Contact:

Effects: Extremely Corrosive! The severity of injury increases with the concentration, the duration of exposure, and the speed of penetration into the eye. Damage can range from severe irritation and mild scarring to blistering, disintegration, ulceration, severe scarring and clouding. Conditions, which affect vision such as glaucoma and cataracts, are possible late developments. In severe cases, there is progressive ulceration and clouding of eye tissue, which may lead to permanent blindness.

First Aid: Immediately flush eyes with lukewarm water for at least 20 minute, and up to 60 minutes if necessary. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention IMMEDIATELY. Do not transport victim until the recommended flushing period is completed unless flushing can be continued during transport.

Ingestion:

Effects: Extremely Corrosive! Severe pain; burning of the mouth, throat and esophagus; vomiting; diarrhea; collapse and possible death may result.

First Aid: DO NOT INDUCE VOMITTING. If victim is alert and not convulsing, rinse mouth and give as much water as possible to dilute material (8 to 10 oz. or 240 to 300 mL). If spontaneous vomiting occurs, have victim lean forward with head down, rinse mouth and administer more water. IMMEDIATELY transport victim to an emergency facility.

Chronic Effects: SKIN: Repeated or prolonged skin contact would be expected to cause drying, cracking, and inflammation of the skin (dermatitis).

Existing Medical Conditions Possibly Aggravated by Exposure: Asthma, bronchitis, emphysema and other lung diseases and chronic nose, sinus or throat conditions. Skin irritation may be aggravated in individuals with existing skin disorders.

Carcinogenicity: Sodium hydroxide is not classified as a carcinogen by ACGIH (American Conference of Governmental Industrial Hygienists) or IARC (International Agency for Research on Cancer), not regulated as a carcinogen by OSHA (Occupational Safety and Health Administration), and not listed as a carcinogen by NTP (National Toxicology Program).

Section 5: Fire-fighting Measures

Flammability	Not applicable. Not Combustible (does not burn)
Flash Point (method)	Not applicable
Flammable Limits (Lower)	Not applicable
Flammable Limits (Upper)	Not applicable
Auto Ignition Temperature	Not applicable
Combustion and Thermal Decomposition Products	Sodium oxide fumes
Rate of Burning	Not applicable
Explosive Power	Not applicable

Sensitivity to Mechanical Impact	Not sensitive; stable material
Sensitivity to Static Charge	Not applicable

Fire and Explosion Hazards: Sodium hydroxide will not burn or support combustion. The reaction of sodium hydroxide with water and a number of commonly encountered materials (See Section 10) can generate sufficient heat to ignite nearby combustible materials. Sodium Hydroxide can react with metals, such as aluminum, tin and zinc, to form flammable hydrogen gas.

Extinguishing Media: Use extinguishing media suitable for the surrounding fire. If water is used, care should be taken, since it can generate heat and couse spattering if applied directly to sodium hydroxide.

Special Information: Evacuate area and fight fire from a safe distance or a protected location. Approach fire from upwind. If possible, isolate materials not involved in the fire and protect personnel. Move containers from fire area if it can be done without risk.

Fire Fighting Protective Equipment: Firefighter's normal protective clothing (Bunker Gear) will not provide adequate protection. Chemical resistant clothing (e.g. chemical splash suit) and positive pressure self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) may be necessary.

Section 6: Accidental Release Measures

Steps to be taken if material is released or spilled:

Small spills: Wash with water and flush down drain.
Large spills: Absorb with inert ingredients such as vermiculite, earth or sand. Dispose in accordance with Federal, State, Local Regulations.
Environmental impact:

Section 7: Handling And Storage

Precautions for safe handling: Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Wash thoroughly after handling.

Conditions for safe storage: Keep container tightly closed and in a well ventilated place. Avoid freezing. Do not expose sealed containers to temperatures above 40 ^{o}C (104 ^{o}F).

Section 8: Exposure Controls/Personal Protection

Exposure controls

Appropriate engineering controls: Good general ventilation (typically 10 air changes per hour) should be used.

Individual protection measures, such as personal protective equipment

General information: Eye bath. Washing facilities. Safety shower.

Eye/face protection: Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection: Wear chemical resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

Respiratory protection: None required

Section 9: Physical And Chemical Properties

Information on basic physical and chemical properties

Alternate Name(s)	Caustic soda liquid 50%, Soda lye, Lye, Liquid Caustic, Sodium Hydrate
Chemical Name	Sodium Hydroxide
Chemical Family	Alkali hydroxide
Molecular Formula	NaOH
Molecular Weight	40.01
Physical State and Appearance	Reddish Color
Odor	Odorless

pH	14.0 (Aqueous solution: 5%)
Vapor Pressure	0.2 kPa (1.5 mm Hg) at 20 °C (68 °F) (50% Solution)
Vapor Density (Air = 1)	Not Applicable
Boiling Point	12 °C (53.6 °F) (50% Solution)
Solubility (Water)	Soluble in all proportions
Specific Gravity	1.53 (50% Solution) 15.5 °C (60 °F)
Evaporation Rate	Not Applicable
Viscosity (cp):	78.3 at 20 °C (68 °F)
Bulk Density (lbs/cu ft):	95.5
Coefficient of Oil/Water Distribution	Essentially Zero

Section 10: Stability And Reactivity

Chemical Stability: Stable at room temperature.

Hazardous Decomposition Products: Thermal decomposition: sodium oxide fumes

Conditions to avoid: Water. Keep away from incompatibles.

Incompatibility with other Substances: Sodium hydroxide reacts vigorously, violently or explosively with many organic and inorganic chemicals, such as strong acids, nitroaromatic, nitroparaffin and organohalogen compounds, glycols, and organic peroxides. Reacts violently with water generating significant hear and dangerously spattering corrosive sodium hydroxide. Violently polymerizes acetaldehyde, acrolein or acrylonitrile. Produces flammable and explosive hydrogen gas if it reacts with sodium tetrahydroborate or certain metals such as aluminum, tin or zinc. Can form spontaneously flammable chemicals upon contact with 1, 2- dichloroethylene, trichloroethylene or tetrachloroethane. Can produce carbon monoxide upon contact with solutions of sugars, such as fructose, lactose, and maltose.

Corrosivity to Metals: Corrosive to aluminum, tin, zinc, copper, and most alloys in which they are present including brass and bronze. Corrosive to steel at elevated temperatures above 40 °C (104°F).

Stability and Reactivity Comments: Slowly attacks glass at room temperature.

Hazardous Polymerization: Will not occur. However, it can induce hazardous polymerization of acetaldehyde, acrolein, and acrylonitrile.

Section 11: Toxicological Information

For more toxicological information, refer to section 4.

TOXICOLOGICAL DATA:

Toxicological Data: Sodium Hydroxide

Toxicity Data: LDLo – Lowest published lethal dose oral rabbit 500 mg / kg
LD_{50} intraperitoneal mouse 40 mg / kg

Irritation Data: Standard Draize Tests: 500 mg/24 hour(s) skin-rabbit severe;
400 µg eyes-rabbit mild; 1 percent eyes-rabbit severe;

Mutagenicity: There is no evidence of mutagenic potential.
Reproductive Effects: No information is available.
Teratogenicity and Fetotoxicity: No information is available.
Synergistic Materials: No information is available.
Skin and Respiratory Sensitization: No information is available.
Irritancy: Strong eye and skin irritant.

Section 12: Ecological Information

Environmental impact: All ingredients are biodegradable.

Section 13: Disposal Considerations

Waste treatment methods:

Disposal methods: Dispose of waste and residues in accordance with federal, state, and local regulations.

Section 14: Transport Information

Important note: Shipping descriptions may vary based on mode of transport, quantities, package size, and /or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

Department of Transportation: Hazardous cleaning liquid

Section 15: Regulatory Information

Safety, health, and environmental regulations/legislation specific for the substance or mixture:

OSHA: Hazardous

Other classifications: Not available

Section 16: Other Information

HMIS® Hazard Ratings: Health – 3 *, Flammability – 0, Chemical Reactivity – 1

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

** HMIS® Rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this SDS must be considered.*

End of Safety Data Sheet