

OVEN CLEANER 4021 --

Section 1. Supplier Information



General Chemical Corp.

12336 Emerson Drive
Brighton, MI 48116
(248) 587-5600

Emergency Telephone: 1-800-424-9300

Section 2. Hazardous Ingredients

<u>Hazardous Component(s)</u>	<u>CAS #</u>	<u>PEL TWA</u>	<u>PEL Ceiling</u>	<u>TLV TWA</u>	<u>TLV STEL</u>	<u>MFG Limits</u>	<u>WGT %</u>
Sodium hydroxide	1310-73-2	2 mg/m3	N/E	N/E	C 2 mg/	N/E	1 - 10
2-Butoxyethanol	111-76-2	50 ppm#	N/E	25 ppm#	N/E	25 ppm#	1 - 10

N/A = Not Applicable; N/E = Not Established; * = Mists; # = Skin; ' = Respirable Dust; " = Total Dust; ^ = Vapor; ** = Fumes; C = Ceiling Limit

All components of this product are listed on the Toxic Substances Control Act (TSCA) Inventory and the Canadian Domestic Substances List (DSL), or are exempt from the listing.

Section 3. Hazards Identification

Primary Routes of Entry

Inhalation: YES
Skin: YES
Ingestion: YES

Hazardous Materials Information System (HMIS) Ratings

Health:	* 2	0 = Minimal
Fire:	0	1 = Slight
Reactivity:	1	2 = Moderate
		3 = Serious
		4 = Severe
		* = Chronic Hazard

Signs of Symptoms of Exposure:

INHALATION: Exposure to mists may cause coughing, sneezing, and other symptoms of respiratory tract irritation. Overexposure may result in lung tissue damage due to corrosive effects.

SKIN: Can be a severe skin irritant. May be corrosive and cause severe burns if not washed immediately.

EYES: This product is destructive to eye tissues on contact. Will cause severe burns that result in damage to the eyes and even blindness.

INGESTION: This product, if swallowed, can cause severe burns and complete tissue perforation of mucous membranes of the mouth, throat, esophagus, and stomach.

Chemical Listed as Potential Carcinogens:

NTP: NO

IARC: NO

OSHA: NO

Target Organs: Eyes, skin, and respiratory system.

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Section 4. Emergency And First Aid Procedures

INHALATION: If adverse effects such as dizziness, nausea, or irritation are noted, move person to fresh air. If not breathing, give artificial respiration. Get medical attention!

SKIN: Immediately wash skin with large amounts of soap and water. Remove contaminated clothing and shoes; wash before reuse. Get medical attention if irritation persists after washing.

EYES: THE OBJECT IS TO FLUSH MATERIAL OUT IMMEDIATELY, THEN SEEK MEDICAL ATTENTION! Immediately flush eyes with large amounts of water for at least 15 minutes, holding lids apart to ensure flushing of the entire surface. Washing eyes within several seconds is essential to achieve maximum effectiveness. SEEK MEDICAL ATTENTION IMMEDIATELY!

INGESTION: If swallowed, dilute with water. Never give fluids if the victim is unconscious or having convulsions. Contact a physician immediately!

Section 5. Fire Fighting Measures

Flash Point: None to boiling. Method Used: Tagliabue Closed Cup

Flammable Limits in Air % by Volume: LEL: N/E UEL: N/E

Extinguisher Media: Use media most appropriate for surrounding fire.

Special Fire Fighting Procedures: Wear a self-contained breathing apparatus when fighting fire in an enclosed area.

Unusual Fire And Explosion Hazards: Low fire hazard when exposed to heat and flame. Product is not flammable or combustible.

Section 6. Accidental Release Measures

If material is spilled, absorb with sand, earth, or similar inert material. Place in closed, labeled containers for proper disposal.

CERCLA (Superfund) Reportable Quantity (in lbs Sodium hydroxide RQ = 1,000 lbs.
Product RQ = 20,000 lbs (2,268 gallons).

Section 7. Handling and Storage

Handling: Avoid contact with skin and eyes; wash thoroughly after handling. Avoid breathing vapor; use with adequate ventilation.

Storage: KEEP FROM FREEZING! Store in a dry location at room temperature. Keep container closed and maintain all original markings and labels. Do not use aluminum or galvanized steel for storage, pumping or transfer.

Other: If this solution is mixed with water, heat will be given off. When diluting, always add this solution to water SLOWLY with constant mixing, in order to avoid splattering.

Section 8. Exposure Controls and Personal Protection

Respiratory Protection: Not required under normal conditions of use.

Local Exhaust: None normally required. Local exhaust may be needed under special circumstances such as poorly ventilated areas, evaporation from large surfaces, spraying, heating, etc.

Mechanical Exhaust: Mechanical ventilation should be sufficient to maintain exposure levels below exposure limits.

Protective Gloves: Wear chemical resistant gloves.

Eye Protection: Safety glasses with side shields. Do NOT wear contact lenses. Chemical goggles and/or faceshield should be worn where splashing is possible.

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Other Protection: Eye wash and safety shower should be readily available.
Hygienic Practices: Avoid contact with skin and avoid breathing vapors or mist. Do not eat, drink, or smoke while using this product. Wash up prior to eating, drinking, or using the restroom.

Section 9. Physical and Chemical Properties

Boiling Point: > 212 ° F
Specific Gravity (H₂O=1): 1.0 - 1.1
Vapor Pressure (mm Hg): Similar to water.
Vapor Density (air=1) 1.0 - 1.5
Solubility in Water: Complete.
Reactivity in Water: Exothermic reaction; heat will be generated.
Weight per Gallon (lb/gal): 8.7 - 8.9 lbs/gal
% Volatile by Volume: 92-94%
% Solid by Weight: 6-8%
Appearance and Odor: Clear, red, syrup-like liquid with a mild odor.
Theoretical VOC: 0 lbs/gal
(>0.1 mm Hg @ 20 ° C)
Analytical VOC : 0.5 - 0.7 lbs/gal
(EPA method 24)
pH: 12.5 - 13.5

Degree of water solubility:
Negligible = Less than 0.1%
Slight = 0.1% - 1%
Moderate = 1% - 10%
Appreciable = More than 10%
Complete = 100%

Section 10. Stability and Reactivity

Stability: Stable. Hazard Polymerization: Will not occur.
Conditions to Avoid: None known.
Incompatibility (Materials to Avoid): Strong acids, flammable liquids, and organic halogens.
Hazardous Decomposition Products: Various organic compounds and oxides of carbon.

Section 11. Toxicological Information

Sodium hydroxide [CASRN 001310-73-2]

ACUTE TOXICITY

Oral LD50 (rat) = 300 - 500 mg/kg (believed to be)
Dermal LD50 (rabbit) > 2 g/kg (believed to be)
[0,7-18,7,F,A,18-121900], [3-2,18,18,F,A-011701]

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2-butoxyethanol [CASRN 000111-76-2]

ACUTE TOXICITY

Oral LD50 (guinea pig) = 1.4 g/kg Eye irritation (rabbit): severe.
Dermal LD50 (guinea pig) > 2 g/kg Skin irritation (rabbit): moderate.
Inhalation LC50 (guinea pig) > 633 ppm, 1 hr

Reproductive and Developmental Toxicity: Inhalation exposure of pregnant rabbits caused some lethality to the dam and fetus at 200 ppm, but there were no effects at 100 ppm and below. In another study by the same route irritancy was noted in the dams and a related fetotoxicity was observed at 100 and 200 ppm, but there were no effects 50 ppm and below. Birth defects were not noted in either study.

Other Testing: Exposure of rats by inhalation to 2-butoxyethanol caused hemolysis, hemoglobinuria (blood in the urine) and a slight increase in liver weight. Other species, including man, were much less sensitive to hemolysis. The hemolytic effect seen in rats was transitory and/or reversible and not considered to be relevant to human health.

Carcinogenicity: The National Toxicology Program (NTP, 1998) has conducted lifetime inhalation bioassays in rats and mice at concentrations up to 125 ppm and 250 ppm 2-butoxyethanol, respectively. NTP found no evidence of carcinogenic activity in male rats, equivocal evidence in female rats based on adrenal tumors, and some evidence in male and female mice based on liver hemangiosarcoma and forestomach tumors. The relevance of these findings to humans is questionable. NTP concludes that the human carcinogenic potential of this material cannot be determined at this time. [18,7-1,14-082400]

Section 12. Ecological Information

Sodium hydroxide [CASRN 001310-73-2]

ECOTOXICITY

96 hr LC50 (mosquito fish) = 125 mg/l Golden shiner: fatal within 1 hour at pH >= 10.9
48 hr LC50 (bluegill) = 99 mg/l Bluegill: fatal within 1 hour at pH >= 10.5

Overview: Because of the high pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems. [0,7-18,7,F,A,18-121900]

2-butoxyethanol [CASRN 000111-76-2]

ECOTOXICITY

48 h LC50 (Daphnia) > 1,000 mg/l 24 h TLm Brine shrimp = 1,000 mg/l
96 h LC50 Fathead minnow = 1,700 mg/l IC50 bacteria > 5,000 mg/l

DEGRADATION

BOD 5 = 26 % (O2 consumption) COD (measured) = 2.25 mg/mg
BOD10 = 74 % ThOD (calculated) = 2.10 - 2.30 mg/mg
BOD20 = 88 % Kow (measured) = 0.83
28 d Sturm test = 90% (CO2 evolved) [20,2-1,2,18-011701]

Section 13. Disposal Considerations

Waste Disposal Methods (Federal, State, Local):

In accordance with all federal, state and local requirements.

RCRA Hazardous Waste Number: D002

Section 14. Transport Information

Hazardous Material Description:

(Proper shipping name, hazard class, hazard ID#, packing group)

Domestic ground non-bulk: UN1824, SODIUM HYDROXIDE SOLUTION, 8, PG II

Domestic ground bulk: RQ UN1824, SODIUM HYDROXIDE SOLUTION, 8, PG II

International: UN1824, SODIUM HYDROXIDE SOLUTION, 8, PG II

Section 15. Regulatory Information

SARA 313 Information

This product contains the following chemical(s) above de minimis concentrations and may be subject to reporting under section 313:

Reportable Category: Certain glycol ethers, 1 - 10%

Section 16. Other Information

This MSDS contains revisions in the following sections: New product

Prepared by: Andrew J. Thomas Chemist

Revised by:

The development of this Material Safety Data Sheet (MSDS) relies upon information provided to us by each of our raw material suppliers. This MSDS will be updated as changes occur to their MSDS(s).

We believe the recommendations and technical information contained herein to be accurate. However, they are given without warranty or guarantee, expressed or implied, and we assume no responsibility for losses or damage, direct or indirect, as a result of their use.