



Safety Data Sheet

Section 1. Substance Identity and Company Contact Information

Product Name Kleenflow™ Basic Flow Analyzer Cleaning Solution **Product Part Number(s)** A001252

Trade Name This product is proprietary material. **Unit Size** 1 L

Company EZkem, 1045 Cannon Drive, Hood River, OR 97031
Phone: 541-387-0343 Fax: 877-576-6791

Emergency No. 1-800-424-9300 (Chemtrec). Use only in the event of chemical emergencies involving spills, leaks, fire, exposure, or accidents involving chemicals.

Section 2. Hazards Identification

Pictogram(s)



Signal Word Danger

Precautionary Statement(s) Corrosive. Cause burns. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection. In case of accident or you feel unwell, seek medical advice immediately (show the label where possible).

Target Organ(s) No data available

Potential Health Effects

Eye:	Yes
Skin:	Yes
Ingestion:	Yes
Inhalation:	Yes

Chronic Effects/ Carcinogenicity

IARC:	Group 1 carcinogen
NTP:	Group 2 carcinogen
OSHA:	Regulated carcinogen

Teratology (Birth Defects) Information No data available

Reproductive Information No data available

NFPA Ratings

Health:	2
Flammability:	0
Reactivity:	0
Special Notice Key:	No data available

HMIS Rating

Health:	2
Flammability:	0
Reactivity:	0
Protective Equipment:	Use goggles and protective gloves when handling.

Section 3. Chemical Composition and Data on Components

Ingredient	CAS No.	Percent	Hazard Data	
			ACGIH TLV	OSHA PEL
Water	007732-18-5	90	No data available	No data available
Sodium Hydroxide	001310-73-2	4	2 mg/m ³	2 mg/m ³
Ethyl alcohol (ethanol)	000064-17-5	5	1,000 ppm	1,000 ppm
Bromothymol blue	000076-59-5	1	No data available	No data available

Section 4. First Aid Measures

General Advice	No data available
If Inhaled	Remove to fresh air. Give oxygen, if necessary. Contact a physician.
In Case of Skin Contact	Flush with copious amounts of water. Remove contaminated clothing. Contact a physician.
In Case of Eye Contact	Flush with copious amounts of water, lifting eyelids occasionally. Contact a physician.
If Swallowed	Contact poison center immediately for recommended procedure. Contact a physician.
Indication of Any Immediate Medical Attention and Special Treatment Needed	No special measures required.

Section 5. Fire-fighting Measures

General Information	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent) and full-protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.
Suitable Extinguishing Media	Carbon dioxide, dry chemical powder, or spray
Special Hazards Arising from the Substance or mixture	No data available
Advice for Firefighters	No data available
Flash Point	No data available
Autoignition Temperature	No data available
Further Information	No data available

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures	Wear appropriate personal protective equipment as specified in Section 8.
Environmental Precautions	No data available
Methods and Materials for Containment and Cleaning	A leaking bottle, vial, or ampule may be placed in a plastic bag, and normal disposal procedures followed. Take up spilled material with sand or other non-combustible absorbent material, and place in an appropriate container for later disposal. Flush spill area with water.
Reference to Other Sections	For disposal, see Section 13.

Section 7. Handling and Storage

Precautions for Safe Handling	Air sensitive.
Conditions for Safe Storage, Including any Incompatibilities	May be stored at room temperature. Keep in a tightly closed container, and store in a corrosion proof area.
Specific End Use(s)	No data available

Section 8. Exposure Controls and Personal Protection

Components with Workplace Control Parameters	No information available
Appropriate Engineering Controls	No data available
Eye/Face Protection	Wear chemical goggles and face shield.
Skin Protection	Wear chemical gloves.
Body Protection	Use appropriate MSHA/NIOSH approved safety equipment. Wear chemical resistant clothing such as a laboratory coat and/or a rubber apron, to prevent contact with eyes, skin, and clothing.
Respiratory Protection	Wear appropriate NIOSH/MSHA-approved respirator, chemical-resistant gloves, safety goggles, and other protective clothing.
Control of Environmental Exposure	Ensure there is adequate ventilation to prevent airborne levels from exceeding recommended exposure limits (see Section II).

Section 9. Physical and Chemical Properties

Appearance	Form: Liquid; Color: Colorless
Odor	No data available
Odor Threshold	No data available
pH	13.3
Melting Point/Freezing Point	0 °C
Initial Boiling Point and Boiling Range	100 °C
Flash Point	No data available
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Upper/Lower Flammability or Explosive Limits	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Relative Density	No data available
Water Solubility	Soluble
Partition Coefficient : n-octanol/water	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No data available
Oxidizing Properties	No data available
Other Safety Information	No data available

Section 10. Stability and Reactivity

Reactivity	No data available
Chemical Stability	Stable
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	Storage in open air.
Incompatible Materials	HCl, HF, HNO ₃ , H ₂ SO ₄

Section 11. Toxicological Information

Routes of Exposure	<i>On the skin:</i>	Irritant effect
	<i>On the eye:</i>	Irritant effect
	<i>Inhalation:</i>	Irritant effect
	<i>Ingestion:</i>	Irritant effect
Respiratory or Skin Sensitization	No information available	
Signs and Symptoms of Overexposure	May include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.	
Toxicity Data	<i>Oral Rat</i>	21,000 mg/kg LD ₅₀

Section 12. Ecological Information

General Notes	No information available
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Section 13. Disposal Considerations

Product	Recycle, if possible. Any material which cannot be saved for recovery or recycling should be disposed of at an appropriate and approved waste disposal facility. Processing, use, and/or contamination of this product may change waste management requirements. Observe all applicable federal, state, and local environmental regulations concerning disposal.
Contaminated Packaging	Dispose according to official regulations.

Section 14. Transport Information

DOT Shipping Name	Corrosive Liquid, Basic, Inorganic, N.O.S.
UN Proper Shipping Name	(Sodium hydroxide solution)
DOT Hazard Class	8
Packing Group	No data available
UN Number	UN3266
Hazardous Ingredients	Sodium Hydroxide
DOT Label	No data available
DOT Placard	No data available

IMDG Shipping Name	No data available
UN Number	UN3266
Class	No data available
Packing Group	No data available

IATA Shipping Name	Corrosive Liquid, Basic, Inorganic, N.O.S.
Technical Shipping Name	(Sodium Hydroxide Solution)
IATA Hazard Class	8
UN Number	UN3266
Hazardous Ingredients	Sodium Hydroxide
IATA Label	No data available
IATA Placard	No data available

Section 15. Regulatory Information

OSHA Status	The above item either does not contain any specifically hazardous material or the potentially hazardous material is present in such low concentration that the item does not present any immediate threat to health and safety. This item does not meet the OSHA Hazard Communication Standard (29 CFR 1910.1200) definition of a hazardous material.	
TSCA Status	All components of this solution are listed in the TSCA inventory.	
CERCLA Reportable Quantity	None reportable	
SARA Title III	No data available	
RCRA Status	No	
California Proposition 65	Not listed	
Chemical Weapons Convention	No	
TSCA 12 (b)	Yes	
SARA 311/312	Acute:	No
	Chronic:	No
	Fire:	No
	Pressure:	No
	Reactivity:	No
Australian Hazchem Code	None allocated	
Poison Schedule	None allocated	
WHMIS	This SDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.	

Section 16. Other Information

Date Prepared: August 29, 2012

Revised: May 22, 2015

For R&D use only. Not for drug, household, or other uses.

