

This product is packaged for retail sale and intended for consumer use. The U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) does not apply to "consumer products" as defined by the U.S. Consumer Product Safety Act and Federal Hazardous Substances Act, including consumer products used in the workplace under typical duration and frequency of exposure as experienced by consumers when used for the intended purpose. This Safety Data Sheet (SDS) is provided as a courtesy to assist with proper use and safe handling. Applicable consumer product use and safety information is provided on the product label and is included for easy reference in Section 16 of this SDS. This SDS is designed to cover both U.S. and Canada. Differences between U.S. and Canadian requirements are noted where applicable

### Section 1: Identification of Product and Company

<b>Product Name</b>	Free and Clear Dish Liquid
<b>Synonyms</b>	Free and Clear Dish
<b>Recommended Use</b>	Hand Dish Washing
<b>Uses advised against</b>	Follow directions on the product label

<b>Manufacturer Name Address</b>	Bi-O-Kleen Industries, Inc. dba Biokleen
<b>Phone Number Fax</b>	PO Box 820689, Vancouver, WA 98665,
<b>Email address</b>	USA 360-576-0064 360-576-0065 barry@biokleenhome.com

<b>Emergency Telephone Number</b>	InfoTrac 800-535-5053
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### Section 2: Hazard Identification

<b>Classification</b>	This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)
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<b>Eye damage/eye irritation</b>	Category 2B
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<b>Signal Word</b>	Warning
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<b>Hazard Statements</b>	Causes eye irritation
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<b>Hazard Pictogram</b>	None
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<b>Precautionary Statement - General Household Products</b>	Keep Away from Children. If medical attention is needed, keep product label in hand. Read label before use
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<b>Precautionary Statement - Prevention</b>	Wash hands thoroughly after handling
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<b>Precautionary Statement - Response</b>	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to so. Continue rinsing. Seek medical attention if eye irritation persists
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# SAFETY



<b>Precautionary Statement - Storage</b>
None

<b>Precautionary Statement - Disposal</b>
None

<b>Hazards not otherwise classified (HNOC)</b>
None known

### Section 3: Composition, Information on Ingredients

Ingredients	Function	CAS number	Concentration <sup>1</sup>	LD50 <sup>2</sup>
Water	diluent	7732-18-5	30% - 100%	Not applicable
Cocamidopropyl Betaine	plant based cleaning agent	61789-40-0	5% - 20%	2700 mg/Kg
Sodium Lauryl Sulfate	plant based cleaning agent	151-21-3	5% - 20%	1288 mg/Kg
Capryryl/Capryl Glucoside	plant derived cleaning agent	68515-73-1	5% - 20%	> 2000 mg/Kg
C10-16 A kyl Glucoside	plant based cleaning agent	110615-47-9	5% - 20%	> 5000 mg/Kg
Lauramine oxide	plant based cleaning agent	1643-20-5	1%-10%	> 2000 mg/Kg
Glycerine	plant based foam stabilizer	56-81-5	0% - 1%	> 12600 mg/Kg
Sodium Chloride	mineral viscosity modifier	7647-14-5	0% - 1%	> 2000 mg/Kg
Sodium Carboxymethyl Inulin	Plant derived water softener	430439-54-6	0% - 1%	> 2000 mg/Kg

Regardless of hazard classification, Biokleen lists all known ingredients and, known incidental ingredients  $\geq 0.5\%$  on the product label.

<sup>1</sup>The exact concentrations have been withheld as a trade secret.

<sup>2</sup> LD50 Acute oral toxicity (rat) values are provided by ingredient suppliers or scientific literature and is not generated by Biokleen. Biokleen does not test on animals to generate LD50 data.

# SAFETY



## Section 4: First Aid Measures

<b>Eye Contact</b>	Rinse with plenty of water immediately. Wash under eyelids too. Do not rub affected area. Seek medical attention if irritation persists.
<b>Skin Contact</b>	Rinse off immediately with plenty of water. Seek medical attention if irritation develops or persists.
<b>Inhalation</b>	If irritation occurs, move to fresh air. Get medical attention immediately if breathing becomes difficult.
<b>Ingestion</b>	Rinse mouth immediately and drink 4-8 oz of water. Never give anything by mouth to an unconscious person. Call a physician if nausea or pain occurs.
<b>Notes to physician</b>	Treat symptomatically
<b>Most important symptoms and effects</b>	Eye irritation with acute exposure

## Section 5: Fire Fighting Measures

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstance and surrounding. Use water, dry chemicals, CO <sub>2</sub>
<b>Unsuitable Extinguishing Media</b>	Not available
<b>Specific Hazards arising from the chemical mixture</b>	Not available
<b>Explosion Data</b>	Not available
<b>Protective Equipment and Precautions for Firefighters</b>	As in any fire, wear self-contained breathing apparatus and full protective gear.

## Section 6: Accidental Release Measures

<b>Personal Precautions</b>	
<b>Industrial Setting</b>	Wear appropriate personal protective equipment (refer to Section 8).
<b>Environmental Precautions</b>	Avoid entry into lakes, streams, ponds or public waterways.
<b>Methods for Containment and Cleaning Up</b>	
<b>Household Setting</b>	Small spills and leaks may be cleaned up and disposed of in normal household trash or diluted and disposed of via sewer.
<b>Industrial Setting</b>	Before attempting clean up, refer to hazard data given. Material may be slippery if spilled and wet. Prevent spill from entering a waterway. Stop spill at source and contain material. Dispose liquid in accordance with all applicable local, state, and federal regulations. Small amounts may be flushed to sewer.

## Section 7: Handling and Storage

<b>Safe Handling</b>	
<b>Household Setting</b>	Use as directed on product label.
<b>Industrial Setting</b>	Wear appropriate personal protective equipment (refer to section 8).
<b>Safe Storage</b>	KEEP OUT OF REACH OF CHILDREN AND PETS. Store in original container and keep container closed when not in use. Avoid freezing.
<b>Storage Incompatibilities</b>	None known.

# SAFETY



## Section 8: Exposure Controls, Personal Protection

Exposure Limits	None known.
Engineering Controls	Not applicable.
<b>Personal Protective Equipment (PPE)</b>	
Household Setting	No special precautions necessary as long as product is used as directed.
Industrial Setting	
Respiratory Protection	None required under normal conditions. General ventilation required.
Eye Protection	Goggles or other protective eye wear may be worn for protection.
Skin Protection	Gloves may be worn for protection.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

## Section 9: Physical and Chemical Properties

Physical State	Liquid
Color	Light Yellow
Clarity	Clear
Odor	Oily
Odor Threshold	Not available
pH	7.5 - 8.9
Melting Point	Not available.
Freezing Point	Not available.
Initial Boiling Point and Boiling Range	Not available.
Flash Point	Not available.
Evaporation Rate	Not available.
Upper Explosive Limit (UEL)	Not applicable.
Lower Explosive Limit (LEL)	Not applicable.
Vapor Pressure (mmHg)	Not available.
Specific Gravity (H <sub>2</sub> O = 1)	Not available.
Relative Density	Not available.
Vapor Density (Air = 1)	Not available.
Solubility in Water	Miscible
Partition Coefficient: n-octanol/water	Not available.
Viscosity	Not available.
VOC (weight %)	Not available.
Explosive Properties	Not available.
Decomposition temperature	Not available.

**Section 10: Stability and Reactivity**

<b>Reactivity</b>	None known.
<b>Chemical Stability</b>	Stable under recommended storage conditions
<b>Possibility of Hazardous Reactions</b>	None under normal processing
<b>Conditions to Avoid</b>	Excessive heat.
<b>Incompatible Materials</b>	
<b>Household Setting</b>	In general, cleaning products should not be mixed with other household chemicals, unless specifically provided for in the use directions.
<b>Industrial Setting</b>	Strong Acid. Strong Oxidizing agent. Strong Bases.
<b>Hazardous Decomposition Products</b>	None known.


**Section 11: Toxicological Information**

<b>Potential Route(s) of Exposure</b>	Eyes. Skin. Ingestion.
<b>Effects of Acute Exposure</b>	
<b>Oral Toxicity</b>	LD50 >5000 mg/kg, calculated based on ingredients.
<b>Dermal Toxicity</b>	Not available.
<b>Inhalation Toxicity</b>	Specific test data for the product is not available. May cause irritation of respiratory tract. Harmful if inhaled. (based on components).
<b>Eye Contact</b>	Mild irritant
<b>Skin Contact</b>	Non irritant based on ingredients.
<b>Component Information</b>	Refer to section 3 for ingredient LD50 (acute oral).
<b>Effects of Chronic Exposure</b>	No known effect based on ingredient information supplied.
<b>Sensitization</b>	May cause sensitization with prolonged contact.
<b>Carcinogenicity</b>	Contains no ingredients listed as a carcinogen
<b>NTP</b>	No Ingredients Listed
<b>OSHA</b>	No Ingredients Listed
<b>Reproductive Effects</b>	No information available.
<b>Teratogenicity</b>	No information available.
<b>Mutagenicity</b>	No information available.
<b>Target Organ Effects</b>	No information available.

**Section 12: Ecological Information**

<b>Ecotoxicity</b>	Not available.
<b>Persistence and Degradability</b>	Not available. Non - Inorganic compounds expected to biodegrade.
<b>Bioaccumulative Potential</b>	Not applicable.
<b>Mobility in Soil</b>	Not available.
<b>Environmental Fate</b>	No adverse effects expected.

**Section 13: Disposal Considerations**

<b>Product Waste</b>	Any disposal must be in compliance with applicable local, state, provincial and federal laws and regulations.
<b>Household Setting</b>	Product residues in the bottle may be discarded in trash, or diluted with water and disposed via sewer. When used as directed, the product is septic-safe.
<b>Industrial Setting</b>	When disposed as waste in its original form, this product is not considered hazardous waste under Federal regulations (40 CFR 261), however regulations may vary by state or province and may designate it as hazardous waste. Check with your local waste and waste water authorities. We are aware of the following state waste classifications:
<b>California Hazardous Waste Code</b>	561
<b>Connecticut Hazardous Waste Code</b>	CT04
<b>Michigan Liquid Waste Code</b>	029L
<b>Washington Hazardous Waste Code</b>	WT02
<b>Empty Packaging</b>	Offer empty container for recycling. If recycling is not available, discard in trash. 

**Section 14: Transport Information**

<b>U.S. DOT</b>	Not regulated.
<b>U.S. States</b>	See U.S. DOT for finished product classification for transport.
<b>Waste</b>	Regulated in some states if the product is disposed of in its original form as waste by commercial users/handlers. Refer to Section 13. for applicable state waste codes.
<b>Canadian TDG (Surface Transport)</b>	Not regulated.
<b>IMDG (Marine Transport)</b>	Not regulated.
<b>IATA (Air Transport)</b>	Not regulated.
<b>MEX</b>	Not regulated.
<b>RID</b>	Not regulated.
<b>ADR</b>	Not regulated.
<b>AND</b>	Not regulated.

**Section 15: Regulatory Information**

U.S.	
<b>Toxic Substances Control Act (TSCA)</b>	This product complies with the inventory requirements of the U.S. Toxic Substances Control Act (TSCA).
<b>California Prop 65</b>	This product is not subject to the labeling requirements of California's Proposition 65.
<b>California Air Resources Board (CARB)</b>	Not applicable.
<b>Section 313 of Title III of the Superfund Amendments and reauthorization Act of 1966. (SARA 313).</b>	This product does not have any ingredients which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372
<b>Clean Water Act (CWA)</b>	This product does not contain any ingredient regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Canada	
<b>Domestic Substances List (DSL)</b>	This product complies with the inventory requirements under Canada's Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL) or is otherwise in compliance with the New Substances Notification (NSN) regulations or exemptions.
<b>WHMIS Hazard Class</b>	Not determined.
<b>Other</b>	Fragrances used in this product comply with applicable International Fragrance Association (IFRA) guidance.

<b>Right to Know</b>	Regardless of hazard classification, Biokleen discloses all intentionally added ingredients and, if applicable incidental ingredients $\geq 0.5\%$ on the product label. Please refer to Section 3. of this SDS for ingredient listing.
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**Section 16: Other Information**

<b>Hazardous Materials Identification System (HMIS) Rating</b> <b>Legend: 4-Severe, 3-Serious, 2-Moderate, 1-Slight, 0-Minimal</b>	<b>HEALTH</b>	1
	<b>FLAMMABILITY</b>	0
	<b>PHYSICAL HAZARD</b>	0
	<b>PROTECTIVE CLOTHING</b>	A

<b>National Fire Protection Association (NFPA) Rating</b>	Not determined
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**Consumer Product Label Information**
**HOW TO USE**

Dispense into sink or directly onto sponge. Wash dishes and rinse thoroughly. NOT FOR USE IN AUTOMATIC DISHWASHERS. KEEP OUT OF REACH OF CHILDREN. If product gets into eyes, flush thoroughly with water. If swallowed, drink plenty of water

**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 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.

**End of Safety Data Sheet**