

Clear Flame Glass Cleaner

SECTION 1. IDENTIFICATION

Product Identifier	Clear Flame Glass Cleaner
Other Means of Identification	KK0290 (Imperial brand)
Recommended Use	Please refer to Product label.
Restrictions on Use	None known.
Manufacturer / Supplier	Kel Kem Ltd. 1333 Cornwall Road, Oakville, Ontario, Canada L6J 7T5 905-829-5888
Emergency Phone No.	CANUTEC, 613-996-6666, 24 Hours (Collect)
SDS No.	1620

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Corrosive to metals - Category 1; Acute toxicity (Oral) - Category 4; Acute toxicity (Dermal) - Category 4; Skin corrosion/irritation - Category 1A; Aquatic hazard (Acute) - Category 1; Aquatic hazard (Chronic) - Category 2

GHS Label Elements



Signal Word:
Danger

Hazard Statement(s):

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statement(s):

Prevention:

P234	Keep only in original container.
P260	Do not breathe dusts or mists.
P264	Wash hands and skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response:

Product Identifier:	Clear Flame Glass Cleaner KK0290
Date of Preparation:	November 26, 2015

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P310 Immediately call a POISON CENTRE/doctor.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P310 Immediately call a POISON CENTRE/doctor.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTRE/doctor if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE/doctor.

P390 Absorb spillage to prevent material damage.

P391 Collect spillage.

Storage:

Store in a well ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Disposal:

Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

Note:

1-5

% of the mixture consists of ingredient(s) of unknown acute toxicity.

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Benzenesulfonic acid, hexadecyl(sulfophenoxy)-, disodium salt	65143-89-7	1-5	
Tetrasodium ethylenediaminetetraacetate	64-02-8	1-5	
Alcohols, C6-12, ethoxylated, liquids	68439-45-2	1-5	
Potassium hydroxide	1310-58-3	1-5	

Notes

The specific chemical identity and/or exact percentage of composition (concentration) has been withheld as a trade secret.

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Take precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment). Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. DO NOT move about unnecessarily. Symptoms of pulmonary edema may be delayed. Avoid mouth-to-mouth contact by using a barrier device. Immediately call a Poison Centre or doctor.

Skin Contact

Avoid direct contact. Wear chemical protective clothing if necessary. Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Quickly and gently blot or brush away excess chemical.

Product Identifier: Clear Flame Glass Cleaner KK0290

Date of Preparation: November 26, 2015

Page 2 of 8

Immediately rinse skin with lukewarm, gently flowing water for at least 30 minutes. Call a Poison Centre or doctor if you feel unwell or are concerned. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

Eye Contact

Avoid direct contact. Wear chemical protective gloves if necessary. Quickly and gently blot or brush chemical off the face. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for at least 30 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately call a Poison Centre or doctor. If eye irritation persists, get medical advice/attention.

Ingestion

Never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again. Avoid mouth-to-mouth contact by using a barrier device. Immediately call a Poison Centre or doctor.

Most Important Symptoms and Effects, Acute and Delayed

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Immediate Medical Attention and Special Treatment

Target Organs

Eyes, skin, digestive system, respiratory system.

Special Instructions

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Medical Conditions Aggravated by Exposure

None known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Chemical

Does not burn.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide; very toxic, flammable formaldehyde; corrosive chemicals.

Special Protective Equipment and Precautions for Fire-fighters

Review Section 6 (Accidental Release Measures) for important information on responding to leaks/spills.

See Skin Protection in Section 8 (Exposure Controls/Personal Protection) for advice on suitable chemical protective materials.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Evacuate downwind locations. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers,

water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for Safe Storage

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Benzenesulfonic acid, hexadecyl(sulfophenoxy)-, disodium salt	Not established	Not established	Not established	Not established		
Tetrasodium ethylenediaminetetraacetate	Not established	Not established	Not established	Not established		
Alcohols, C6-12, ethoxylated, liquids	Not established	Not established	Not established	Not established		
Potassium hydroxide	Not established	2 mg/m3	Not established	2 mg/m3		

Appropriate Engineering Controls

General ventilation is usually adequate. For large scale use of this product: provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.
Suitable materials are: nitrile rubber.

Respiratory Protection

Not normally required if product is used as directed. For non-routine or emergency situations: wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

Product Identifier: Clear Flame Glass Cleaner KK0290

Date of Preparation: November 26, 2015

Page 4 of 8

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Cloudy liquid.
Odour	Not available
Odour Threshold	Not available
pH	> 13
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not applicable
Evaporation Rate	Not available
Flammability (solid, gas)	Not applicable
Upper/Lower Flammability or Explosive Limit	Not applicable (upper); Not applicable (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	1.04 - 1.06 at 20 °C
Solubility	Not available in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not applicable
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)
Other Information	
Physical State	Liquid
Molecular Weight	Not available

SECTION 10. STABILITY AND REACTIVITY

Reactivity None

known. **Chemical**

Stability Normally stable.

Possibility of Hazardous Reactions

Decomposes in the presence of increased temperature.

Conditions to Avoid

None known.

Incompatible Materials

Metals (e.g. aluminum), organic acids (e.g. acetic acid), oxidizing agents (e.g. peroxides), strong acids (e.g. hydrochloric acid), strong bases (e.g. sodium hydroxide), reducing agents (e.g. hydroquinone).
Corrosive to: aluminum alloys.

Hazardous Decomposition Products

Toxic, corrosive chemicals; very toxic, flammable formaldehyde; very toxic carbon monoxide, carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Product Identifier: Clear Flame Glass Cleaner KK0290

Date of Preparation: November 26, 2015

Page 5 of 8

Skin contact; eye contact.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Benzenesulfonic acid, hexadecyl(sulfophenoxy)-, disodium salt	Not available	7744 mg/kg (rat)	Not available
Tetrasodium ethylenediaminetetraacetate	Not available	> 2000 mg/kg (rat)	Not available
Alcohols, C6-12, ethoxylated, liquids	Not available	Not available	Not available
Potassium hydroxide	Not available	273 mg/kg (male rat)	> 1260 mg/kg (rabbit)

LC50: Not applicable.

LD50 (oral): Not applicable.

LD50 (dermal): Not applicable.

Skin Corrosion/Irritation

Human experience and animal tests show skin corrosion.

Serious Eye Damage/Irritation

Human experience and animal tests show serious eye damage.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May be harmful based on human experience and animal tests. Severe nose and throat irritation. Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest. (Potassium hydroxide).

Skin Absorption

No information was located.

Ingestion

Toxic, can cause death based on human experience. Severe irritation or burns to the mouth, throat and stomach. Permanent damage can result.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Cause Following skin contact: dermatitis. Symptoms may include dry, red, cracked skin (dermatitis).

Respiratory and/or Skin Sensitization

Not known to be a skin sensitizer. No information was located.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Benzenesulfonic acid, hexadecyl(sulfophenoxy)-, disodium salt	Not Listed	Not designated	Not Listed	Listed
Tetrasodium ethylenediaminetetraacetate	Not Listed	Not designated	Not Listed	Not Listed
Alcohols, C6-12, ethoxylated, liquids	Not Listed	Not designated	Not Listed	Not Listed
Potassium hydroxide	Not Listed	Not designated	Not Listed	Not Listed

Reproductive Toxicity

Development of Offspring

Product Identifier: Clear Flame Glass Cleaner KK0290

Date of Preparation: November 26, 2015

No information was located.

Sexual Function and Fertility

No information was located.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Benzenesulfonic acid, hexadecyl(sulfophenoxy)-, disodium salt	Not available	Not available		
Tetrasodium ethylenediaminetetraacetate	41 mg/L (Lepomis macrochirus (bluegill); 96-hour)	Not available		
Alcohols, C6-12, ethoxylated, liquids	Not available	Not available		
Potassium hydroxide	80 mg/L (Oncorhynchus mykiss (rainbow trout); 96-hour)	Not available		

Chronic Aquatic Toxicity

Chemical Name	NOEC Fish	EC50 Fish	NOEC Crustacea	EC50 Crustacea
Benzenesulfonic acid, hexadecyl(sulfophenoxy)-, disodium salt	Not available		Not available	
Tetrasodium ethylenediaminetetraacetate	Not available		Not available	
Alcohols, C6-12, ethoxylated, liquids	Not available		Not available	

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

No information was located.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Product Identifier: Clear Flame Glass Cleaner KK0290

Date of Preparation: November 26, 2015

Disposal Methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium hydroxide)	8	II
US DOT	3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium hydroxide)	8	II

Environmental Hazards Marine Pollutant (Alcohols, C6-12, ethoxylated, liquids)

Special Precautions for User Please note: In containers of 1 L (1Kg) capacity or less this product is classified as a "Limited Quantities""Consumer Commodity" under TDG regulations.
In containers of 1 L (1Kg) this product is qualified as a "consumer commodity" ORM-D under DOT

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

SDS Prepared By Kel Kem Ltd.

Phone No. 905-829-5888

Date of Preparation November 26, 2015

Additional Information

Ingredients present (intentionally added ingredients) at a concentration of greater than one percent (1%) shall be listed in descending order of predominance. Ingredients present at a concentration of not more than one percent shall be listed but may be disclosed without respect to order of predominance.

Disclaimer Notice to the Reader: The information is provided in good faith and is correct to the best of Kel Kem Ltd.'s knowledge as of the date hereof and is designed to assist our customers; however Kel Kem Ltd. makes no representation as to its completeness or accuracy. Final determination of suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Kel Kem Ltd. disclaims all expressed or implied warranties or representations.

Product Identifier: Clear Flame Glass Cleaner KK0290

Date of Preparation: November 26, 2015