

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : **Concentrated Glass Cleaner**
Product code : GP113

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Window Cleaner

1.3. Details of the supplier of the safety data sheet

Flo-Kem
19402 Susana Rd.
Rancho Dominguez, CA 90221 - USA
T 310-632-7124 - F 310-631-7496
<http://www.flo-kem.com>

1.4. Emergency telephone number

Emergency number : CHEMTEL: 800-255-3924

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Flam. Liq. 4 H227
Skin Irrit. 2 H315
Eye Irrit. 2A H319

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms :



GHS07

Signal word :

Warning

Hazard statements :

Combustible liquid.
Causes skin irritation.
Causes serious eye irritation.

Precautionary statements :

Keep away from heat, hot surfaces, open flames, sparks. - No smoking.
Wash hands and forearms thoroughly after handling.
Wear eye protection, protective gloves.
If on skin: Wash with plenty of water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.
In case of fire: Use alcohol resistant foam, BC-powder, carbon dioxide (CO2), dry chemical, sand to extinguish.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container in accordance with Local, State, and Federal regulations.

2.3. Hazard not otherwise classified (HNOC)

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

Concentrated Glass Cleaner

Safety Data Sheet

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

(NOTE: If component displays the * (asterisk) symbol, the following statement applies.)

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of H-phrases: see section 16

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
1-butoxy-2-propanol	(CAS No) 5131-66-8	5 - 10	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
sodium lauryl ether sulfate	(CAS No) 9004-82-4	1 - 10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
dipropylene glycol monomethyl ether	(CAS No) 34590-94-8	5 - 10	Flam. Liq. 4, H227
ethanol	(CAS No) 64-17-5	1 - 5	Flam. Liq. 2, H225

(NOTE: If component displays the * (asterisk) symbol, the following statement applies.)

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: If skin irritation or rash occurs: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation persists, get medical attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: Not expected to present a significant hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
Symptoms/injuries after skin contact	: Causes skin irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: FOLLOWING SYMPTOMS MAY APPEAR LATER: Gastrointestinal complaints. Irritation of the gastric/intestinal mucosa. Irritation of the oral mucous membranes. Nausea.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Alcohol-resistant foam. BC powder. Carbon dioxide. Dry chemical powder. Sand/earth.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Combustible liquid.
-------------	-----------------------

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	: Although product has a flash point <200° F, it is an aqueous solution and does not sustain combustion.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Isolate from fire, if possible, without unnecessary risk.
------------------	--

Concentrated Glass Cleaner

Safety Data Sheet

6.1.1. For non-emergency personnel

Protective equipment : Protective goggles.
Protective gloves.
Protective clothing.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain released substance, pump into suitable containers. Plug the leak, cut off the supply.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Wash down leftovers with plenty of water. Wash clothing and equipment after handling.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Do not breathe mist, vapors. Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Observe normal hygiene standards. Provide good ventilation in process area to prevent formation of vapor. Use only outdoors or in a well-ventilated area. Use personal protective equipment as required.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands and forearms thoroughly after handling. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Provide local exhaust or general room ventilation. Comply with applicable regulations.

Incompatible products : Strong acids. Oxidizing agent.

Storage area : Store in a cool, dry well-ventilated area. Keep container tightly closed when not in use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ethanol (64-17-5)		
OSHA	OSHA PEL (TWA) (mg/m ³)	1900 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

dipropylene glycol monomethyl ether (34590-94-8)		
ACGIH	ACGIH TWA (ppm)	100 ppm
ACGIH	ACGIH STEL (ppm)	100 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	600 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
OSHA	OSHA PEL (STEL) (mg/m ³)	900 mg/m ³
OSHA	OSHA PEL (STEL) (ppm)	150 ppm

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. In case of insufficient ventilation, wear suitable respiratory equipment.

Concentrated Glass Cleaner

Safety Data Sheet

Other information : When using, do not eat, drink or smoke.
Appropriate engineering controls : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : Dark blue
Odor : Floral
Odor threshold : No data available
pH : 7.1 - 8.1
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : > 140 °F
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : No data available
Explosive limits : No data available
Vapor pressure : No data available
Vapor density : No data available

Specific Gravity @ 77° F : 0.988 - 1.008
Solubility : Soluble in water.
Partition Coefficient n-Octanol-Water : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available

9.2. Other information

VOC content : < 135 g/l CARB VOC

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under recommended conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Extremely high or low temperatures. Heat. Open flame. Sparks.

10.5. Incompatible materials

Strong acids. Oxidizers.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Sulfur oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

ethanol (64-17-5)	
LD50 oral rat	10740 mg/kg body weight (Rat; OECD 401: Acute Oral Toxicity; Experimental value)
LD50 dermal rabbit	> 16000 mg/kg (Rabbit; Literature study)
ATE US (oral)	10740.000 mg/kg body weight

Concentrated Glass Cleaner

Safety Data Sheet

dipropylene glycol monomethyl ether (34590-94-8)	
LD50 oral rat	5135 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; >5000 mg/kg; Rat; Experimental value)
LD50 dermal rat	9500 mg/kg (Rat; Literature study; Equivalent or similar to OECD 402; >19020 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	9500 mg/kg (Rabbit; Literature study)
ATE US (oral)	5135.000 mg/kg body weight
ATE US (dermal)	9500.000 mg/kg body weight

1-butoxy-2-propanol (5131-66-8)	
LD50 oral rat	> 2000 mg/kg (Rat)
LD50 dermal rabbit	3100 mg/kg (Rabbit)
ATE US (dermal)	3100.000 mg/kg body weight

Skin corrosion/irritation	: Causes skin irritation. pH: 7.1 - 8.1
Serious eye damage/irritation	: Causes serious eye irritation. pH: 7.1 - 8.1
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met
Symptoms/injuries after skin contact	: Causes skin irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: FOLLOWING SYMPTOMS MAY APPEAR LATER: Gastrointestinal complaints. Irritation of the gastric/intestinal mucosa. Irritation of the oral mucous membranes. Nausea.

SECTION 12: Ecological information

12.1. Toxicity

ethanol (64-17-5)	
LC50 fish 1	14200 mg/l (96 h; Pimephales promelas; Nominal concentration)
EC50 Daphnia 1	9300 mg/l (48 h; Daphnia magna)
LC50 fish 2	13000 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 2	10800 mg/l (24 h; Daphnia magna)
Threshold limit other aquatic organisms 1	65 mg/l (72 h; Protozoa)
Threshold limit algae 1	1450 mg/l (192 h; Microcystis aeruginosa; Growth rate)
Threshold limit algae 2	5000 mg/l (168 h; Scenedesmus quadricauda; Growth rate)

dipropylene glycol monomethyl ether (34590-94-8)	
LC50 fish 1	> 10000 mg/l (96 h; Pimephales promelas; GLP)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h; Crangon crangon)
LC50 fish 2	> 150 mg/l (72 h; Pisces)
Threshold limit other aquatic organisms 1	> 1000 mg/l (96 h; Crangon crangon)
Threshold limit algae 1	969 mg/l (72 h; Selenastrum capricornutum; GLP)
Threshold limit algae 2	> 969 mg/l (72 h; Selenastrum capricornutum; GLP)

1-butoxy-2-propanol (5131-66-8)	
LC50 fish 1	1060 mg/l (Fathead minnow)
EC50 Daphnia 1	> 1000 mg/l
NOEC (acute)	560 mg/l (Daphnia magna)

12.2. Persistence and degradability

Concentrated Glass Cleaner

Safety Data Sheet

ethanol (64-17-5)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. No (test) data on mobility of the substance available.
Biochemical oxygen demand (BOD)	0.8 - 0.967 g O ₂ /g substance
Chemical oxygen demand (COD)	1.70 g O ₂ /g substance
ThOD	2.10 g O ₂ /g substance
BOD (% of ThOD)	0.43 % ThOD
sodium lauryl ether sulfate (9004-82-4)	
Persistence and degradability	Not established.
dipropylene glycol monomethyl ether (34590-94-8)	
Persistence and degradability	Readily biodegradable in water. No (test) data on mobility of the substance available. Photolysis in the air.
Biochemical oxygen demand (BOD)	0 g O ₂ /g substance
ThOD	2.06 g O ₂ /g substance
BOD (% of ThOD)	0 % ThOD
1-butoxy-2-propanol (5131-66-8)	
Persistence and degradability	Readily biodegradable in water.
12.3. Bioaccumulative potential	
ethanol (64-17-5)	
Log Pow	-0.31 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
sodium lauryl ether sulfate (9004-82-4)	
Bioaccumulative potential	Not established.
dipropylene glycol monomethyl ether (34590-94-8)	
Log Pow	0.0043 (Experimental value; OECD 102: Melting Point/Melting Range; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
1-butoxy-2-propanol (5131-66-8)	
Log Pow	0.98 (QSAR)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
12.4. Other adverse effects	
Other information	: Avoid release to the environment.
SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Waste disposal recommendations	: Dispose of contents/container in accordance with Local, State, and Federal regulations.
Ecology - waste materials	: Avoid release to the environment.
SECTION 14: Transport information	
14.1. UN Number	
UN-No.(DOT)	: Not Regulated
Other information	: Although product has a flash point <200° F, it is an aqueous solution and does not sustain combustion.
14.2. UN proper shipping name	
DOT Proper Shipping Name	: Not Regulated
SECTION 15: Regulatory information	
15.1. US Federal regulations	
All components of this product are listed on the Toxic Substances Control Act (TSCA) inventory	

Concentrated Glass Cleaner

Safety Data Sheet

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

ethanol (64-17-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Immediate (acute) health hazard Fire hazard
sodium lauryl ether sulfate (9004-82-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
dipropylene glycol monomethyl ether (34590-94-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard
1-butoxy-2-propanol (5131-66-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard

15.2. International regulations

CANADA

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

SECTION 16: Other information

Abbreviations Legend:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 4	Flammable liquids Category 4
Skin Irrit. 2	Skin corrosion/irritation Category 2
H225	Highly flammable liquid and vapor
H227	Combustible liquid
H315	Causes skin irritation
H319	Causes serious eye irritation

Disclaimer

This document is generated for the purpose of distributing health, safety, and environmental data. The information and recommendations are presented in good faith and believed to be from reliable sources, however, the information is provided without any warranty, expressed or implied, regarding its completeness or accuracy. Some information is from sources other than direct test data on the material itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and for this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of the product.

ALL NON-EMERGENCY QUESTIONS SHOULD BE DIRECTED TO CUSTOMER SERVICE (310) 632-7124

Revision date: 05/27/2015

Supersedes: 03/21/2013

Version: 1.0