

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

1.1. Product identifier

Product form : Mixture
Product name : **Detail Kleen**
Product code : 5270

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

Use of the substance/mixture : Degreaser

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)

Skin Irrit. 2 H315
Eye Dam. 1 H318

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms :



GHS05

Signal word : Danger

Hazard statements : Causes skin irritation.
Causes serious eye damage.

Precautionary statements : Wash hands and forearms thoroughly after handling.
Wear eye protection, protective gloves, protective clothing.
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.
Immediately call a POISON CENTER or doctor/physician.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.

2.3. Hazard not otherwise classified (HNOC)

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

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

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Name	Product identifier	%	Classification (GHS-US)
2-butoxyethanol	(CAS No) 111-76-2	1 - 5	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
trisodium orthophosphate, dodecahydrate	(CAS No) 10101-89-0	1 - 5	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
disodium metasilicate	(CAS No) 6834-92-0	1 - 5	Skin Corr. 1B, H314 STOT SE 3, H335

(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. Immediately call a POISON CENTER or doctor/physician.
- 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. May cause moderate irritation.
- Symptoms/injuries after eye contact : Causes serious eye damage.
- 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

No additional information available

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 : No additional information available.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Isolate from fire, if possible, without unnecessary risk.

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.

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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. Observe normal hygiene standards. Provide local exhaust or general room ventilation. 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

2-butoxyethanol (111-76-2)		
ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	ACGIH STEL (ppm)	20 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	97 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	20 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.
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 : Clear green
Odor : Mild
Odor threshold : No data available
pH : 12.3 - 13.3
Melting point : No data available
Freezing point : No data available
Boiling point : No data available

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Flash point	: > 200 °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	: 1.036 - 1.056
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	: < 45 g/l CARB VOC
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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.

10.5. Incompatible materials

Strong acids. Oxidizers.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Phosphorus oxides. Sulfur oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
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2-butoxyethanol (111-76-2)	
LD50 oral rat	530 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 1746 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rat	> 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
LD50 dermal rabbit	435 mg/kg body weight (Rabbit; Experimental value; OECD 402: Acute Dermal Toxicity; 435 mg/kg bodyweight; Rabbit; Weight of evidence; Equivalent or similar to OECD 402)
LC50 inhalation rat (mg/l)	2.17 mg/l/4h (Rat; Experimental value; 2.35 mg/l/4h; Rat; Experimental value)
LC50 inhalation rat (ppm)	450-486,Rat; Weight of evidence
ATE US (oral)	530.000 mg/kg body weight
ATE US (dermal)	435.000 mg/kg body weight
ATE US (gases)	700.000 ppmV/4h
ATE US (vapors)	2.170 mg/l/4h
ATE US (dust, mist)	2.170 mg/l/4h
disodium metasilicate (6834-92-0)	
LD50 dermal rat	> 5000 mg/kg body weight (Rat; Read-across; OECD 402: Acute Dermal Toxicity)
trisodium orthophosphate, dodecahydrate (10101-89-0)	
LD50 oral rat	7400 mg/kg (Rat; OECD 420: Acute Oral toxicity – Acute Toxic Class Method; Literature study; >2000 mg/kg bodyweight; Rat)
LD50 dermal rabbit	> 7940 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 0.83 mg/l/4h (Rat; Read-across)
ATE US (oral)	7400.000 mg/kg body weight

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Skin corrosion/irritation	: Causes skin irritation. pH: 12.3 - 13.3
Serious eye damage/irritation	: Causes serious eye damage. pH: 12.3 - 13.3
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified

2-butoxyethanol (111-76-2)

IARC group	3 - Not Classifiable
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
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. May cause moderate irritation.
Symptoms/injuries after eye contact	: Causes serious eye damage.
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

2-butoxyethanol (111-76-2)

LC50 fish 1	116 ppm (96 h; Cyprinodon variegatus; Nominal concentration)
EC50 Daphnia 1	1700 mg/l (48 h; Daphnia sp.; Nominal concentration)
LC50 fish 2	1341 ppm (96 h; Lepomis macrochirus)
EC50 Daphnia 2	1720 mg/l (24 h; Daphnia magna)
TLM fish 1	100 - 1000,96 h; Pisces
TLM other aquatic organisms 1	100 - 1000,96 h
Threshold limit algae 1	900 mg/l (168 h; Scenedesmus quadricauda)
Threshold limit algae 2	35 mg/l (192 h; Microcystis aeruginosa)

disodium metasilicate (6834-92-0)

LC50 fish 1	210 mg/l (96 h; Brachydanio rerio)
EC50 Daphnia 1	216 mg/l (96 h; Daphnia magna; Static system)
LC50 fish 2	2320 mg/l (96 h; Gambusia affinis)
EC50 Daphnia 2	632 mg/l (96 h; Lymnaea sp.; Static system)
Threshold limit algae 1	207 mg/l (72 h; Scenedesmus subspicatus; GLP)

trisodium orthophosphate, dodecahydrate (10101-89-0)

LC50 fish 1	2400 mg/l (48 h; Leuciscus idus; Anhydrous form)
EC50 Daphnia 1	> 100 mg/l (48 h; Daphnia magna)
LC50 fish 2	220 mg/l (96 h; Lepomis macrochirus; Anhydrous form)
Threshold limit algae 1	> 100 mg/l (72 h; Desmodesmus subspicatus)

12.2. Persistence and degradability

2-butoxyethanol (111-76-2)

Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photodegradation in the air.
Biochemical oxygen demand (BOD)	0.71 g O ₂ /g substance
Chemical oxygen demand (COD)	2.20 g O ₂ /g substance
ThOD	2.305 g O ₂ /g substance
BOD (% of ThOD)	0.31 % ThOD

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disodium metasilicate (6834-92-0)	
Persistence and degradability	Biodegradability: not applicable. No (test) data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

trisodium orthophosphate, dodecahydrate (10101-89-0)	
Persistence and degradability	Biodegradability: not applicable. Biodegradability in soil: not applicable. No (test) data on mobility of the substance available.
ThOD	Not applicable (inorganic)

12.3. Bioaccumulative potential

2-butoxyethanol (111-76-2)	
Log Pow	0.81 (Experimental value; BASF test; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

disodium metasilicate (6834-92-0)	
Bioaccumulative potential	Bioaccumulation: not applicable.

trisodium orthophosphate, dodecahydrate (10101-89-0)	
Bioaccumulative potential	Not bioaccumulative.

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 : No supplementary information available

14.2. UN proper shipping name

DOT Proper Shipping Name : Not Regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

2-butoxyethanol (111-76-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard

disodium metasilicate (6834-92-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

trisodium orthophosphate, dodecahydrate (10101-89-0)	
RQ (Reportable quantity, section 101(14) of CERCLA as published on EPA's List of Lists) :	5000 lb
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

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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

trisodium orthophosphate, dodecahydrate (10101-89-0)

Trisodium orthophosphate dodecahydrate appears on the U.S. EPA TSCA Inventory under the cas# representing the anhydrous form of this material (7601-54-9 trisodium phosphate, crystalline).

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:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 4	Flammable liquids Category 4
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H227	Combustible liquid
H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation

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