

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

Product identifier 1.1.

Product form : Mixture

Product name : Graffiti Remover II

Product code : 11323

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

Use of the substance/mixture : Graffiti Remover

Details of the supplier of the safety data sheet 1.3.

Flo-Kem

19402 Susana Rd.

Rancho Dominguez, CA 90221 - USA T 310-632-7124 - F 310-631-7496

http://www.flo-kem.com

Emergency telephone number

Emergency number : CHEMTEL: 800-255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture

Classification (GHS-US)

Flam. Liq. 4 H227 Skin Irrit. 2 H315 Eve Dam. 1 H318 Skin Sens. 1 H317 Carc. 2 H351

Full text of H-phrases: see section 16

Label elements

GHS-US labeling

Hazard pictograms



GHS05

GHS07



Signal word : Danger

Hazard statements : Combustible liquid.

Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing cancer.

Precautionary statements : Obtain special instructions before use.

> Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, open flames, sparks. - No smoking.

Avoid breathing mist, vapors.

Wash hands and forearms thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Wear eye protection, protective clothing, 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 exposed or concerned: Get medical advice/attention. Immediately call a POISON CENTER or doctor/physician. If skin irritation or rash occurs: 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.

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Store locked up.

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

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)
(+)-limonene	(CAS No) 5989-27-5	15 - 20	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Isopropylamine alkylbenzenesulfonic	(CAS No) 68649-00-3	5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
alcohols, C9-11, ethoxylated	(CAS No) 68439-46-3	1 - 5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318
triethanolamine dodecylbenzene sulfonate	(CAS No) 27323-41-7	1 - 5	Skin Irrit. 2, H315 Eye Dam. 1, H318
diethanolamine	(CAS No) 111-42-2	0.1 - 1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Carc. 2, H351 STOT RE 2, H373

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

SECTION 4: 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: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water. Wash

contaminated clothing before reuse. If skin irritation persists, get medical attention.

: 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.

: 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 an allergic skin reaction. Repeated exposure may cause skin

dryness or cracking.

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

First-aid measures after eye contact

First-aid measures after ingestion

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.

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

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Special hazards arising from the substance or mixture 5.2.

Fire hazard : Combustible liquid.

Reactivity : Reacts with (strong) oxidizers and with (some) acids.

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.

Although product has a flash point <200° F, it is an aqueous solution and does not sustain Other information

combustion.

SECTION 6: Accidental release measures

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.

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.

: Ventilate area. Emergency procedures

Environmental precautions 6.2.

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

Methods and material for containment and cleaning up

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

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

clothing and equipment after handling.

Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

Precautions for safe handling

Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Do not breathe mist, vapors. Do not handle until all

safety precautions have been read and understood. 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.

Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or Hygiene measures

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.

Conditions for safe storage, including any incompatibilities

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

precautionary measures against static discharge.

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

Control parameters

diethanolamine (111-42-2)		
ACGIH	ACGIH TWA (mg/m³)	1 mg/m³
OSHA	OSHA PEL (TWA) (mg/m³)	2 mg/m³

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diethanolamine (111-42-2)			
	OSHA	OSHA PEL (TWA) (ppm)	0.46 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 light green

Odor : Citrus

Odor threshold : No data available

pH : 9.5 - 10.5

Melting point: No data availableFreezing point: No data availableBoiling 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 : 0.970 - 0.990

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 : < 230 g/l CARB VOC

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with (strong) oxidizers and with (some) acids.

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. Open flame. Heat. Sparks.

10.5. Incompatible materials

Strong acids. Oxidizers.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Nitrogen oxides. Sulfur oxides.

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SECTION 1	11: Tox	icoloc	nical in	formation	h
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11.1. Information on to	cicological el	fects
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Acute toxicity : Not classified

alcohols, C9-11, ethoxylated (68439-46-3)	
LD50 oral rat	1378 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
ATE US (oral)	1378.000 mg/kg body weight

diethanolamine (111-42-2)		
LD50 oral rat	620 mg/kg (Rat)	
LD50 dermal rabbit	7640 mg/kg (Rabbit)	
ATE US (oral)	620.000 mg/kg body weight	
ATE US (dermal)	7640,000 mg/kg body weight	

(+)-limonene (5989-27-5)	
LD50 oral rat	4400 mg/kg body weight (Rat; OECD 423: Acute Oral Toxicity – Acute Toxic Class Method; Literature study; > 2000 mg/kg bodyweight; Rat; Read-across)
LD50 dermal rabbit	> 5000 mg/kg body weight (Rabbit; Weight of evidence; Equivalent or similar to OECD 402)
ATE US (oral)	4400.000 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.

pH: 9.5 - 10.5

Serious eye damage/irritation : Causes serious eye damage.

pH: 9.5 - 10.5

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer.

diethanolamine (111-42-2)	
IARC group	2B - Possibly Carcinogenic to Humans
(+)-limonene (5989-27-5)	
IARC group	3 - Not Classifiable

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. May cause an allergic skin reaction. Repeated exposure may cause skin

dryness or cracking.

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

alcohols, C9-11, ethoxylated (68439-46-3)	
LC50 fish 1	5.7 mg/l (Rainbow trout)
EC50 Daphnia 1	2.5 mg/l

diethanolamine (111-42-2)		
LC50 fish 1	1664 mg/l (96 h; Pimephales promelas; Static system)	
EC50 Daphnia 1	180 mg/l (24 h; Daphnia magna)	
LC50 fish 2	14000 mg/l (96 h; Gambusia affinis; Static system)	
EC50 Daphnia 2	55 mg/l (48 h; Daphnia magna)	

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diethanolamine (111-42-2)		
Threshold limit algae 1	10 mg/l (192 h; Scenedesmus quadricauda; Inhibitory)	
(+)-limonene (5989-27-5)		
LC50 fish 1	720 μg/l (96 h; Pimephales promelas; Lethal)	
EC50 Daphnia 1	0.36 mg/l (48 h; Daphnia magna; GLP)	
LC50 fish 2	702 μg/l (96 h; Pimephales promelas)	
Threshold limit algae 1	150 mg/l (72 h; Desmodesmus subspicatus; GLP)	
Threshold limit algae 2	2.62 mg/l (72 h; Desmodesmus subspicatus)	

12.2. Persistence and degradability

alcohols, C9-11, ethoxylated (68439-46-3)				
Persistence and degradability	Readily biodegradable in water.			
diethanolamine (111-42-2)				
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photodegradation in the air.			
Biochemical oxygen demand (BOD)	0.22 g O2/g substance			
Chemical oxygen demand (COD)	1.52 g O2/g substance			
ThOD	2.13 g O2/g substance			
BOD (% of ThOD)	0.10 % ThOD			
(+)-limonene (5989-27-5)				
Persistence and degradability	Readily biodegradable in water. Forming sediments in water. Adsorbs into the soil.			
ThOD	3.29 g O2/g substance			

12.3. Bioaccumulative potential

alcohols, C9-11, ethoxylated (68439-46-3)			
Bioaccumulative potential	No bioaccumulation data available.		
diethanolamine (111-42-2)			
Log Pow	-2.181.43 (Experimental value)		
Bioaccumulative potential	Bioaccumulation: not applicable.		
(+)-limonene (5989-27-5)			
BCF fish 1	864.8 - 1022 (Pisces; Fresh weight)		
Log Pow	4.38 (Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 37 °C)		
Bioaccumulative potential	Potential for bioaccumulation (4 ≥ Log Kow ≤ 5).		

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

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SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed on the Toxic Substances Control Act (TSCA) inventory

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.

Isopropylamine alkylbenzenesulfonic (68649-00-3)				
Listed on the United States TSCA (Toxic Substances Control Act) inventory				
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard			
alcohols, C9-11, ethoxylated (68439-46-3)				
Listed on the United States TSCA (Toxic Substances Control Act) inventory				
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard			
triethanolamine dodecylbenzene sulfonate (27323-41-7)				
Listed on the United States TSCA (Toxic Substances Control Act) inventory				
RQ (Reportable quantity, section 101(14) of CERCLA as published on EPA's List of Lists):	1000 lb			
diethanolamine (111-42-2)				
Listed on IARC (International Agency for Research on Cancer) Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)				
RQ (Reportable quantity, section 101(14) of CERCLA as published on EPA's List of Lists):	100 lb			
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard			
(+)-limonene (5989-27-5)				
Listed on the United States TSCA (Toxic Substances Control Act) inventory				
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) 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

diethanolamine (111-42-2)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity

diethanolamine (111-42-2)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)	
Yes	No	No	No		

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SECTION 16: Other information

Abbreviations Legend:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4		
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1		
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1		
Asp. Tox. 1	Aspiration hazard Category 1		
Carc. 2	Carcinogenicity Category 2		
Eye Dam. 1	Serious eye damage/eye irritation Category 1		
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A		
Flam. Liq. 3	Flammable liquids Category 3		
Flam. Liq. 4	Flammable liquids Category 4		
Skin Irrit. 2	Skin corrosion/irritation Category 2		
Skin Sens. 1	Skin sensitization Category 1		
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2		
H226	Flammable liquid and vapor		
H227	Combustible liquid		
H302	Harmful if swallowed		
H304	May be fatal if swallowed and enters airways		
H315	Causes skin irritation		
H317	May cause an allergic skin reaction		
H318	Causes serious eye damage		
H319	Causes serious eye irritation		
H351	Suspected of causing cancer		
H373	May cause damage to organs through prolonged or repeated		
	exposure		
H400	Very toxic to aquatic life		
H410	Very toxic to aquatic life with long lasting effects		

Disclaime

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