NATURAL CITRUS DEGREASER

UNI-KEM CHEMICALS, INC.

802 Wm. Leigh Drive Tullytown, PA 19007 Phone—800-752-1120 Fax—215-269-9855

GENERAL DESCRIPTION: NATURAL CITRUS CLEANER is a fast acting butyl and d'limonene based cleaner and degreaser for removal of spots, stains and soil buildups. NATURAL CITRUS CLEANERworks miracles on heavily soiled kitchen floors and quarry tile floors. NATURAL CITRUS CLEANER is also an excellent grout cleaner when used with a scrub brush. It's pleasant frangrance makes NATURAL CITRUS CLEANER a natural for all maintenance and general cleaning applications including engines, white wall tires, ceramics, formica, and all hard surfaces not affected by water.

PHYSICAL PROPERTIES:

| THE STORES | |
|----------------------|-----------------------------------|
| Chemical Composition | Emulsifiers, Penetrating |
| | agents, water conditioners, |
| 5 | stabilizing and buffering agents, |
| \$ | soil suspending agents. |
| Appearance | |
| pH | 8.9 |
| pH of 1% solution | 8 0 |
| Specific gravity | 1.047 (8.7 lbs/gal) |
| Stability 6 mc | onths @ Ambient Temperature |
| Wetting Ability | Good |
| Free Caustic | |
| Foam | Low to Moderate |
| Rinsing | Complete |
| Solubility | |
| Emulsification | Rapid |
| Odor | Strong Citrus |
| | |

DIRECTIONS FOR USE:

Spray and mop or scrub product on surface to be cleaned. Allow cleaner to remain on surface for a few seconds before wiping off with damp cloth.

Heavy soil loads: Use 8-12 ounces per gallon

Medium soil loads: Use 4-8 ounces per gallon

Lighter soil loads: Use 2-4 ounces per gallon

HANDLING PRECAUTIONS:

CAUTION: WARNING KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Contact with skin and eyes may cause severe irritation. Harmful if swallowed. Flood with water if splashed in eyes. Flush with water for 15 minutes and consult physician immediately. If ingested, drink large amounts of milk, milk of magnesia or gelatin, or if these are not available, drink large amounts of water. DO NOT induce vomitiing. Obtain prompt medical attention.

PACKAGING:

4/1 gal plastic bottles - 34 lbs net / 38 lbs gross 5 gallon plastic pails - 44 lbs net/47 lbs gross

CODE:

NCD

SAFETY DATA SHEET

Issuing Date No data available

Revision Date 16-Dec-2013

Revision Number 0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier

NATURAL CITRUS DEGREASER **Product Name**

Other means of identification

Product Code(s) NCD

NCD **Synonyms**

Recommended use of the chemical and restrictions on use

Recommended Use Institutional All Purpose Detergent

No information available Uses advised against

Supplier's details

Supplier Address Uni-Kem Chemicals, Inc. 802 Wm. Leigh Drive Tullytown, Pa 19007 800-752-1120

Emergency telephone number

Emergency Telephone

1-703-527-3887

Number

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

| Skin Corrosion/Irritation | Category 2 | |
|-----------------------------------|------------|--|
| Serious Eye Damage/Eye Irritation | Category 2 | |

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word **Hazard Statements** Causes skin irritation Warning

Causes serious eye irritation



Appearance Purple

Physical State Liquid.

Odor No information available

Precautionary Statements

Prevention

- Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection.

General Advice

Specific treatment (see supplemental first aid instructions on this label)

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue
- If eye irritation persists: Get medical advice/attention.

Skin

- IF ON SKIN: Wash with plenty of soap and water
- If skin irritation occurs: Get medical advice/attention
- Take off contaminated clothing and wash before reuse.

Storage

None

Disposal

None

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms

NCD

| Chemical Name | CAS-No | Weight % | Trade secret |
|-----------------------------------|-----------|----------|--------------|
| 2-Butoxyethanol | 111-76-2 | 5-10 | * |
| Diethylene glycol monobutyl ether | 112-34-5 | 5-10 | * |
| Potassium hydroxide | 1310-58-3 | 5-10 | * |

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of necessary first-aid measures

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention if symptoms occur.

Wash off with warm water and soap. Remove and wash contaminated clothing before Skin Contact

re-use. If symptoms persist, call a physician.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

Ingestion Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an

unconscious person. If swallowed, seek medical attention.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects No information available.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None

Specific Hazards Arising from the Chemical

No information available.

Explosion Data

Sensitivity to Mechanical Impact Sensitivity to Static Discharge None.

None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin,

eyes and clothing. Stop leak if you can do it without risk. If spilled, take caution, as material

can cause surfaces to become very slippery.

Environmental Precautions

Environmental Precautions Dispose of contents/container to an approved waste disposal plant.

Methods and materials for containment and cleaning up

Methods for Containment Stop leak if you can do it without risk

Methods for Cleaning Up Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Revision Date 16-Dec-2013 WPS-ENV-040 - NCD

Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Use only in area provided with appropriate exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Do not take internally. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep container Storage

closed when not in use.

None known based on information supplied. Incompatible Products

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|----------------------------------|------------------------------|--|--|
| 2-Butoxyethanol 111-76-2 | TWA: 20 ppm | TWA: 50 ppm TWA: 240 mg/m³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m³ (vacated) S* | IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m³ |
| Potassium hydroxide 1310-58-3 | Ceiling: 2 mg/m ³ | (vacated) Ceiling: 2 mg/m³ | Ceiling: 2 mg/m ³ |

Appropriate engineering controls

Showers **Engineering Measures**

Evewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Skin and Body Protection **Respiratory Protection**

Safety glasses with side-shields.

Lightweight protective clothing. Impervious gloves.

None required under normal usage. If exposure limits are exceeded or irritation is

experienced, approved respiratory protection should be worn.

Handle in accordance with good industrial hygiene and safety practice. **Hygiene Measures**

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Purple Liquid Appearance **Physical State** Odor Threshold

No information available No information available Odor

Remarks/ - Method Values Property None known 12.0

рН No data available None known Melting Point/Range None known **Boiling Point/Boiling Range** >100 °C / >212 °F None known No data available Flash Point None known No data available Evaporation rate None known No data available Flammability (solid, gas)

Flammability Limits in Air

No data available upper flammability limit lower flammability limit No data available

No data available None known Vapor Pressure No data available None known Vapor Density

None known No data available Relative Density None known 1.044 Specific Gravity None known 100 Water Solubility No data available None known Solubility in other solvents Partition coefficient: n-octanol/waterNo data available None known None known No data available **Autoignition Temperature** None known No data available **Decomposition Temperature** No data available None known Viscosity

Flammable Properties Not flammable

Explosive Properties No data available
Oxidizing Properties No data available

Other information

VOC Content (%) No data available

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

None known based on information supplied.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation No known effect based on information supplied.

Eye Contact Causes serious eye irritation.

Skin Contact Causes skin irritation.

Ingestion No known effect based on information supplied

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-----------------------------------|---------------------|--|--|
| 2-Butoxyethanol | = 470 mg/kg (Rat) | = 400 mg/kg(Rabbit) = 2270 mg/kg(Rat) | = 2.21 mg/L (Rat) 4 h = 450 ppm (Rat) 4 h |
| Diethylene glycol monobutyl ether | = 3384 mg/kg (Rat) | = 2700 mg/kg(Rabbit) | • |

| Potassium hydroxide | = 214 mg/kg(Rat) | - | - |
|---------------------|------------------|---|---|

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

No information available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization

No information available.

Mutagenic Effects

No information available.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|-----------------|-------|---------|-----|------|
| 2-Butoxyethanol | A3 | Group 3 | | |

ACGIH: (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 3: Not Classifiable as to its Carcinogenicity to Humans Reproductive Toxicity

No information available.

STOT - single exposure STOT - repeated exposure

No information available. No information available.

Aspiration Hazard

No information available.

Numerical measures of toxicity - Product

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral LD50 Dermal 5850 mg/kg; Acute toxicity estimate 13391 mg/kg; Acute toxicity estimate

Inhalation

Vapor

dust/mist

33.9 mg/L; Acute toxicity estimate

249 mg/L; Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|---|---------------------------------------|---|-------------------------------|---|
| 2-Butoxyethanol 111-76-2 Diethylene glycol monobutyl ether | EC50 96 h: > 100 mg/L (Desmodesmus | LC50 96 h: = 1490 mg/L static (Lepomis macrochirus) LC50 96 h: = 2950 mg/L (Lepomis macrochirus) LC50 96 h: = 1300 mg/L static (Lepomis macrochirus) | | EC50 24 h: 1698 - 1940 mg/L (Daphnia magna) EC50 48 h: > 1000 mg/L (Daphnia magna) EC50 24 h: = 2850 mg/L (Daphnia magna) EC50 4 |
| 112-34-5 Potassium hydroxide | subspicatus) | LC50 96 h: = 80 mg/L static (Gambusia affinis) | | h: > 100 mg/L (Daphnia magna) |

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

| Chemical Name | Log Pow |
|---------------------|---------|
| 2-Butoxyethanol | 0.81 |
| Potassium hydroxide | 0.83 |

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

Dispose of in accordance with federal, state, and local regulations

Contaminated Packaging

Do not re-use empty containers.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name | California Hazardous Waste |
|------------------------|----------------------------|
| Potassium hydroxide | Toxic |
| , ottoballi, i januari | Corrosive |

14. TRANSPORT INFORMATION

DOT

Not regulated

15. REGULATORY INFORMATION

International Inventories

Complies **TSCA** Complies DSL Complies **EINECS** Complies **IECSC** Complies **KECL** Complies **PICCS** Complies **AICS**

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Chemical Name | CAS-No | Weight % | SARA 313 - Threshold Values % |
|-----------------------------------|----------|----------|----------------------------------|
| 2-Butoxyethanol | 111-76-2 | 5-10 | 1.0 |
| Diethylene glycol monobutyl ether | 112-34-5 | 5-10 | 1.0 |
| Dietnylene glycol monobutyr ether | 112 01 0 | | |

SARA 311/312 Hazard Categories

Yes Acute Health Hazard **Chronic Health Hazard** No No Fire Hazard No Sudden Release of Pressure Hazard No Reactive Hazard

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

| | | | | OVALA Hamandania |
|---------------|--------------------------------|------------------------|---------------------------|-------------------------------|
| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |

Revision Date 16-Dec-2013

| Potassium hydroxide | 1000 lb | | | X | |
|---------------------|---------|--|--|---|--|

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ |
|---------------------|--------------------------|------------------------------------|---|
| Potassium hydroxide | 1000 lb | | RQ 1000 lb final RQ RQ 454 kg final RQ |

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

| Chemical Name | New Jersey | Massachusetts | Pennsylvania | Illinois | Rhode Island |
|-----------------------------------|------------|---------------|--------------|----------|--------------|
| 2-Butoxyethanol | X | Х | Х | Х | X |
| Diethylene glycol monobutyl ether | Х | | х | Х | |
| Potassium hydroxide | Х | Х | X | | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

| 16. OTHER INFORMATION | | | | | | |
|-----------------------|-----------------|----------------|-------------------|------------------------------------|--|--|
| NFPA | Health Hazard 2 | Flammability 0 | Instability 0 | Physical and Chemical Hazards - | | |
| <u>HMIS</u> | Health Hazard 2 | Flammability 0 | Physical Hazard 0 | Personal Protection X | | |
| | 16 Dec 1 | 2012 | | | | |

Revision Date Revision Note 16-Dec-2013 Initial Release.

General Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a 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 material or in any process, unless specified in the text.

End of Safety Data Sheet