Prepared according to U.S. OSHA, CMA, ANSI, Canadian WHMIS, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Union Reach Regulation, Directives 67/548/EC & 1999/45/EC and CLP Regulation 1272/2008/EC

1. PRODUCT IDENTIFICATION

TRADE NAME (AS LABELED): Orange Klean

PRODUCT CODE: FP-032
PRODUCT USE: Cleaner
U.N. NUMBER: None

<u>U.N. DANGEROUS GOODS CLASS:</u> Non-Regulated Material

MANUFACTURERED FOR: GREENER CLEANER PLANET

ADDRESS: 501 Hereford Rd., Corpus Christi, TX 78408 USA

BUSINESS PHONE: 1-800-970-7219 FAX#: 1-361-994-7900

EMERGENCY PHONE: 1-800-535-5053 or 1-352-323-3500

DATE OF PREPARATION: November 12, 2013

DATE OF LAST REVISION: New

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: Product Description: This product is a slightly yellowish liquid with a slight citrus odor. **Health Hazards:** Harmful in contact with skin and eyes. May cause irritation to the respiratory tract. Harmful if swallowed. **Flammability Hazards:** Non-Flammable liquid with a flash point greater than 200°F. **Reactivity Hazards:** None known. **Environmental Hazards:** The environmental effects of this product have not been investigated, however release may cause long term adverse environmental effects. **Emergency Considerations:** Emergency responders must wear the proper personal protective equipment (and have appropriate fire-suppression equipment) suitable for the situation to which they are responding.

EU LABELING AND CLASSIFICATION:

This product meets the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

EU HAZARD CLASSIFICATION PER DIRECTIVE 1272/2008/EC:

Index Number:

EC# 231-791-2 This substance is not classified in the Annex I of Directive 67/548/EEC

EC# 203-905-0 Annex I Index# 603-014-00-0

CAS# 1300-72-7 is not listed in ESIS

EC# 229-912-9 Annex I Index# 014-010-00-8

EC# 271-528-9 This substance is not classified in the Annex I of Directive 67/548/EEC

EC# 231-838-7 This substance is not classified in the Annex I of Directive 67/548/EEC

EC# 215-185-5 Annex I Index# 011-002-00-8

CAS# 68439-46-3 is not listed in ESIS

EC# 200-661-7 Annex I Index# 603-117-00-0

EC# 227-813-5 Annex I index# 601-029-00-7

EC# 267-055-2 This substance is not classified in the Annex I of Directive 67/548/EEC

Substances not listed either individually or in group entries must be self classified.

Component(s) Determining Hazards:

Disodium Metasilicate, Sodium Hydroxide, 2-butoxyethanol, Alcohols, C9-11, ethoxylated, IPA, Di-Limonene

GHS Classifications:

Acute Inhalation Toxicity Category 4
Acute Dermal Toxicity Category 4
Acute Oral Toxicity Category 4
Skin Irritant Category 2
Eye Irritant Category 2
STOT SE Category 3
Acute Aquatic Toxicity Category 1

Page 1 of 7

Signal Word: Warning! **Hazard Symbol:**



Hazard Statement:

H302: Harmful if swallowed

H312: Harmful in contact with skin H319: Causes serious eye irritation

H332: Harmful if inhaled

H335: May cause respiratory irritation

Precautionary Statement:

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+352 IF ON SKIN: wash with plenty of soap and water.

EU HAZARD CLASSIFICATION PER DIRECTIVE 1999/45/EC:

Classification: [Xn] Harmful, [Xi] Irritant

Risk Phrases: R20/21/22, Harmful by inhalation, in contact with skin and if swallowed; R36/37/38: Irritating to eyes,

respiratory system and skin

<u>Safety Phrases</u>: S2: Keep out of reach of children; S7/9: Keep container closed and in a well ventilated place; S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice; S36/37: Wear protective clothing and gloves; S45: In case of an accident or if you feel unwell, seek medical advice immediately.

Annex II Hazard Symbol:



HEALTH HAZARDS OR RISKS FROM EXPOSURE:

Primary Routes(s) Of Entry: Skin Contact, Eye Contact, Inhalation, Ingestion

EYE HAZARDS: Contact will cause irritation with pain, tearing and redness.

SKIN HAZARDS: Prolonged or repeated contact may cause irritation. May cause dry and cracking skin.

INGESTION HAZARDS: Ingestion of this product may cause gastrointestinal irritation with diarrhea, nausea and

vomiting.

INHALATION HAZARDS: May cause irritation to the respiratory tract.

3. COMPOSITION and INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS:	CAS#	EINECS#	AMOUNT	HAZARD SYMBOLS	HAZARD CLASSIFICATION 1999/45/EC; RISK PHRASES
Water	7732-18-5	231-791-2	80- 85%	None	HAZARD CLASSIFICATION: None RISK PHRASES: None
2-butoxyethanol	111-76-2	203-905-0	1 - 5%		HAZARD CLASSIFICATION: [Xn] Harmful, [Xi] Irritant RISK PHRASES: R20/21/22, R36/38
Sodium Xylenesulphonate	1300-72-7	Not Listed in ESIS	1 - 5%	<u>(1)</u>	HAZARD CLASSIFICATION: [Xi] Irritant RISK PHRASES: R36/38
Disodium Metasilicate	6834-92-0	229-912-9	1 - 5%		HAZARD CLASSIFICATION: [C] Corrosive, [Xi] Irritant RISK PHRASES: R34, R37
Benzenesulfonic acid, C10-16- alkyl derivs	68584-22-5	271-528-9	1 – 5%	<u>(1)</u>	HAZARD CLASSIFICATION: [XI] Irritant RISK PHRASES: R36/38
Pentasodium Triphosphate	7758-29-4	231-838-7	1 - 5%	1	HAZARD CLASSIFICATION: {Xi] Irritant RISK PHRASES: R36/38

Sodium Hydroxide	1310-73-2	215-185-5	1 - 5%	<u>(1)</u>	HAZARD CLASSIFICATION: {Xi] Irritant RISK PHRASES: R36/38	
Alcohols, C9-11, ethoxylated	68439-46-3	Not Listed in ESIS	1 - 5%	<u>(1)</u>	HAZARD CLASSIFICATION: [Xi] Irritant RISK PHRASES: R38, R41	
IPA	67-63-0	200-661-7	1 – 5%	<u>(1)</u>	HAZARD CLASSIFICATION: [Xi] Irritant RISK PHRASES: R36, R67	
Di-Limonene	5989-27-5	227-813-5	1 – 5%	1	HAZARD CLASSIFICATION: [Xi] Irritant, [N] Dangerous to the Environment RISK PHRASES: R38, R43, R50/53	
Methyl Ester	67784-80-9	267-055-2	1 – 5%	1	HAZARD CLASSIFICATION: (Xi] Irritant RISK PHRASES: R36/38	
Each of the other components is for potential carcinogens, reprodu						

NOTE: ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2010 format. This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR, EU Regulation 1272/2008 and the Japanese Industrial Standard *JIS Z 7250: 2000*.

4. FIRST-AID MEASURES

EYE CONTACT: If chemical contacts the eyes, open victim's eyes while under gentle running water. Use

sufficient force to open eyelids. Have victim "roll" eyes. Minimum flushing is for 15 minutes.

Remove contact lenses, if worn. Seek medical attention.

SKIN CONTACT: Wash contacted area with soap and water. Remove exposed or contaminated clothing, taking

care not to contaminate eyes. Seek medical attention if irritation develops and persists.

INHALATION: If chemical is inhaled, or breathing is difficult, remove victim to fresh air. If necessary, use

artificial respiration to support vital functions. Seek medical attention.

INGESTION: If chemical is swallowed, call physician or poison control center for most current information. If

professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of the label and MSDS with the victim

to the health professional.

<u>MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:</u> Persons with pre-existing skin disorders, eye problems, impaired respiratory function may be more susceptible to the effects of the substance. **RECOMMENDATIONS TO PHYSICIANS:** Treat symptoms and eliminate overexposure.

5. FIRE-FIGHTING MEASURES

FLASH POINT: >200° F

AUTOIGNITION TEMPERATURE: Not Available

FLAMMABLE LIMITS (in air by volume, %): Lower NA Upper NA

FIRE EXTINGUISHING MATERIALS: Dry chemical, Foam, Carbon

Dioxide.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known

<u>Explosion Sensitivity to Mechanical Impact</u>: Not Sensitive <u>Explosion Sensitivity to Static Discharge</u>: Not Sensitive

SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

HEALTH PLANTAGE REACTIVITY

NFPA RATING

Hazard Scale: **0** = Minimal **1** = Slight **2** = Moderate **3** = Serious **4** = Severe

OTHER

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Proper protective equipment should be used.

SPILLS: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Dispose of in accordance with applicable Federal, State, and local regulatory procedures (see Section 13, Disposal Considerations).

7. HANDLING and STORAGE

<u>WORK PRACTICES AND HYGIENE PRACTICES:</u> As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product.

STORAGE AND HANDLING PRACTICES: Store in a cool, dry, well-ventilated area away from incompatible substances. Protect from physical damage.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/GUIDELINES:

Component Name	CAS#	ACGIH-TLVs	OSHA PELs	NIOSH- TLV's	<u>Other</u>
Water	7732-18-5	None Listed	None Listed	None Listed	None Listed
2-butoxyethanol	111-76-2	240 mg/m³	240 mg/m³	None Listed	240 mg/m³
Sodium Xylenesulphonate	1300-72-7	None Listed	None Listed	None Listed	None Listed
Disodium Metasilicate	6834-92-0	None Listed	None Listed	None Listed	None Listed
Benzenesulfonic acid, C10- 16-alkyl derivs	68584-22-5	None Listed	None Listed	None Listed	None Listed
Pentasodium Triphosphate	7758-29-4	None Listed	None Listed	None Listed	None Listed
Sodium Hydroxide	1310-73-2	2 mg/m³	2 mg/m³	2 mg/m³	2 mg/m³
Alcohols, C9-11, ethoxylated	68439-46-3	None Listed	None Listed	None Listed	None Listed
IPA	67-63-0	200 ppm	400 ppm	None Listed	200 ppm
Di-Limonene	5989-27-5	None Listed	None Listed	None Listed	None Listed
Methyl Ester	67784-80-9	None Listed	None Listed	None Listed	None Listed

<u>VENTILATION AND ENGINEERING CONTROLS:</u> Use with adequate ventilation to ensure exposure levels are maintained below the established limits.

Currently, International exposure limits are not established for all the components of this product. Please check with competent authority in each country for the most recent limits in place.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Not normally required with this product. If exposure limits are exceeded, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Splash goggles or safety glasses with side shields recommended to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

<u>HAND PROTECTION:</u> Compatible protective gloves recommended. Wash hands after removing gloves. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

<u>BODY PROTECTION:</u> Use body protection appropriate for task. Coveralls, rubber aprons, or chemical protective clothing made from natural rubber are generally acceptable, depending upon the task. If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

9. PHYSICAL and CHEMICAL PROPERTIES

VAPOR DENSITY: Same as Water EVAPORATION RATE (n-BuAc=1): Not Available

SPECIFIC GRAVITY @ 20°C: Not Available (water=1) SOLUBILITY IN WATER: Complete

VAPOR PRESSURE: Same as Water ph: Not Available

BOILING POINT: >93°C (>200°F) **FREEZING POINT:** <32°F

APPEARANCE, **ODOR** and **COLOR**: This product is a slightly yellowish liquid with a slight citrus odor.

10. STABILITY and REACTIVITY

STABILITY: Stable under ordinary conditions of use and storage

DECOMPOSITION PRODUCTS: Thermal decomposition may produce oxides of carbon.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Strong oxidizing agents, strong bases.

HAZARDOUS DEPOLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Excessive heat, incompatible materials

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

CAS# 111-76-2:

Oral, rat: LD50 = 3300 mg/kg;

CAS# 67-63-0:

Oral, rat: LD50 = 5045 mg/kg

SUSPECTED CANCER AGENT: None of the components of this product are listed by agencies tracking the carcinogenic potential of chemical compounds:

IRRITANCY OF PRODUCT: This product may be irritating to eyes, respiratory system and skin.

SENSITIZATION TO THE PRODUCT: None known

REPRODUCTIVE TOXICITY INFORMATION: Listed below is information concerning the effects of this product and its components on the human reproductive system.

Mutagenicity: The components of this product are not reported to produce mutagenic effects in humans.

<u>Embryotoxicity</u>: The components of this product are not reported to produce embryotoxic effects in humans.

Teratogenicity: The components of this product are not reported to produce teratogenic effects in humans.

Reproductive Toxicity: The components of this product are not reported to produce reproductive effects in humans.

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

TOXICITY: No Data

MOBILITY IN SOIL: No Data

<u>PERSISTENCE/DEGRADABILITY:</u> Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

ENVIRONMENTAL STABILITY: Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways

BIOACCUMULATION/ACCUMULATION: These products have not been tested for bio-accumulation potential.

WATER ENDANGERMENT CLASS: Not Established

13. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

EU Waste Code: Not Listed

14. TRANSPORTATION INFORMATION

US DOT, IATA, IMO, ADR:

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS: This product is classified (per 49 CFR

172.101) by the U.S. Department of Transportation, as follows.

PROPER SHIPPING NAME: Non-Regulated Material

HAZARD CLASS NUMBER and DESCRIPTION: None **UN IDENTIFICATION NUMBER:** None PACKING GROUP: None **DOT LABEL(S) REQUIRED:** None

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER: None

RQ QUANTITY: None

MARINE POLLUTANT: The components of this product are not designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is not considered as dangerous goods.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is not considered as dangerous goods.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is not considered by the United Nations Economic Commission for Europe to be dangerous goods

15. REGULATORY INFORMATION

UNITED STATES REGULATIONS:

SARA REPORTING The components of this product are subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and REQUIREMENTS

Reauthorization Act. SECTION 302 (RQ)

None

SECTION 302 (TPQ)

None

SECTION 313

None

TSCA All components in this product mixture are listed on the US Toxic Substances

Control Act (TSCA) inventory of chemicals.

SARA 311/312: Acute Health: Yes; Chronic Health: Yes; Fire: No; Reactivity: Yes

U.S. CERCLA REPORTABLE QUANTITY (RQ): CAS# 1310-73-2: 1000 lb final RQ; 454 kg final RQ; CAS# 7758-29-4: 5000 lb final RQ; 2267.9 kg final RQ

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): This product does not contain a component above the 0.1% level which is listed as a California Proposition 65 chemical.

CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: All of the components of this product are on the DSL Inventory.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

<u>CANADIAN WHMIS CLASSIFICATION and SYMBOLS:</u> This product is categorized as D2B Materials causing other toxic effects, as per the Controlled Product Regulations.



EU HAZARD INFORMATION:

See section 2 for details

AUSTRALIAN INFORMATION FOR PRODUCT:

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) STATUS: All components of this product are listed on the AICS or exempt.

STANDARD FOR THE UNIFORM SCHEDULING OF DRUGS AND POISONS: Not applicable.

JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac: Listed

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Listed

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed Philippines Inventory if Chemicals and Chemical Substances (PICCS): Listed

Swiss Giftliste List of Toxic Substances: Listed

U.S. TSCA: Listed

16. OTHER INFORMATION

PREPARED BY: Paul Eigbrett **DATE:** November 12, 2013

GHS MSDS Compliance PLUS

All chemicals may pose unknown hazards and should be used with cautions. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, GREENER CLEANER PLANET assumes no responsibility for the completeness or accuracy of the information contained herein. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and protection of the environment

ABBREVIATIONS AND ACRONYMS:

ARD: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

End of MSDS Sheet