

1. PRODUCT AND COMPANY IDENTIFICATION

Manufacturer

Titan Laboratories
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Product Name: Titan Green Multipurpose Cleaner™

Revision Date: January 2, 2017

Version: 1.8

SDS Number: 820

Common Name: Cleaner

CAS Number: MIXTURE

Chemical Family: Cleaner

Chemical Formula: *** PROPRIETARY ***

Emergency Phone: +1-800-255-3924

2. HAZARDS IDENTIFICATION

NFPA:
HMIS III:

Health = 1, Fire = 1, Reactivity = 0
H*1/F1/PH0



HMIS III	
HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARDS	0
PERSONAL PROTECTION B Safety Glasses, Gloves	

PERSONAL PROTECTION INDEX			
A	Goggles	G	Goggles + Gloves + Respirator
B	Goggles + Gloves	H	Goggles + Gloves + Protective Clothing + Respirator
C	Goggles + Gloves + Wash	I	Goggles + Gloves + Wash + Respirator
D	Respirator + Gloves + Wash	J	Goggles + Gloves + Wash + Protective Clothing + Respirator
E	Goggles + Gloves + Wash + Respirator	K	Respirator + Gloves + Wash + Protective Clothing + Respirator
F	Goggles + Gloves + Wash + Respirator + Protective Clothing	X	Consult your supervisor or S.O.P. for "SPECIAL" handling directions
A	Safety Glasses	n	Eye Wash
t	Full Face Respirator	U	Ultraviolet Protection
W	Wash & Rinse	Y	Full Face Respirator
Z	Additional Information		

GHS Signal Word:
WARNING

GHS Hazard Pictograms:



GHS Classifications:
Health, Acute toxicity, 4 Oral

Health, Acute toxicity, 5 Dermal
Health, Skin corrosion/irritation, 2
Health, Serious Eye Damage/Eye Irritation, 2 A

GHS Phrases:

H302 - Harmful if swallowed
H313 - May be harmful in contact with skin
H315 - Causes skin irritation
H319 - Causes serious eye irritation

GHS Precautionary Statements:

P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P262 - Do not get in eyes, on skin, or on clothing.
P264 - Wash skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P281 - Use personal protective equipment as required.
P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P321 - Specific treatment (see supplementary first aid instructions on this label).
P332+313 - If skin irritation occurs: Get medical advice/attention.
P337+313 - If eye irritation persists: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.
P405 - Store locked up.
P410+412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
P501 - Dispose of contents/container to an approved waste disposal plant.

Health Hazards: Not to be expected if handled and used properly. Health hazard assignment applies to concentrated product only. When this product is used at the dilutions recommended by Titan Laboratories, it attributes minimal to no health hazards, acute or chronic, to the end user.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CAS #	Percentage	Chemical Name
N/A	75-95%	Proprietary, non-hazardous, non-regulated
111-76-2	1-5%	2-Butoxyethanol
7601-54-9	1-5%	Phosphoric acid, trisodium salt
9016-45-9	1-5%	Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-
6834-92-0	1-5%	Silicic acid (H ₂ SiO ₃), disodium salt
68130-47-2	1-5%	Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, mono-C8-10-alkyl ethers, phosphates

4. FIRST AID MEASURES

Inhalation: Give oxygen or artificial respiration if needed. If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.

Skin Contact: Take off contaminated clothing and shoes immediately. Promptly flush skin with water for at least 15 minutes to ensure all chemical is removed. If reddening develops and/or persists, obtain medical attention.

Eye Contact: Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Remove contact lenses if present and easy to do so. If eye irritation persists, obtain medical attention.

Ingestion: Rinse mouth with water. Do NOT induce vomiting unless instructed to do so. Never give anything by mouth to an unconscious person. Get immediate medical attention.

Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described in the labelling (see Section 2) and/or Section 11.

Indication of any immediate medical attention and special treatment needed: No data available.

5. FIRE FIGHTING MEASURES

Flammability	No data available
Flash Point	DNA
Flash Point Method	DNA
Burning Rate	No data available
Autoignition Temp	No data available
LEL	DNA
UEL	DNA

Extinguishing Media:

Water Spray
Carbon Dioxide
Alcohol-Resistant Foam
Dry Chemical

Special Hazards Arising From the Substance or Mixture: Carbon Oxides Nitrogen Oxides (NOx) Phosphorous Oxides, Silicon Oxides, Sodium Oxides

Advice for Firefighters: Firefighters should wear full-face, positive-pressure respirators.

Further Information: If incinerated, may release toxic fumes. Use water spray to cool unopened containers. See Section 7 for more information on safe handling. See Section 8 for more information on personal protection equipment. See Section 13 for disposal information.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Use personal protective equipment. Keep from contacting skin or eyes. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental Precautions: Prevent further release (leakage/spillage) if safe to do so. Do not allow product to enter drains. Do not allow to drain to environment.

Methods and Materials for Containments and Cleaning Up: Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Neutralizing agent like Sodium Bicarbonate may also be used to absorb/neutralize any spilled material. Place contaminated material into suitable, closed containers for disposal. Dispose of contaminated material according to Section 13. After spillage has been collected, area may be flushed with water or wet-brushed. Ensure adequate ventilation.

Reference to Other Sections: See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for information on proper disposal.

7. HANDLING AND STORAGE

Handling Precautions:

Avoid breathing vapors or mist.
Avoid contact with eyes, skin, or clothing. Keep containers closed when not in use.

Do not expose containers to open flame, excessive heat, or direct sunlight. Keep away from sources of ignition. Do not smoke while using material. Do not puncture or drop containers. Handle with care and avoid spillage on the floor (slippage). Keep material out of reach of children. Keep material away from incompatible materials.

Storage Requirements:

Wash thoroughly after handling. Keep container tightly closed. Store in a well-ventilated place.

Do not store at temperatures exceeding 50 °C/122 °F.

Do not store in direct sunlight.

Store away from strong acids, strong bases, strong oxidizing agents, strong reducing agents, reactive metals (Zinc & Aluminum) and their alloys (Brass, etc.), Alkali metals, powdered metals, organic materials, chlorinated solvents, Phosphorous, Tin/Tin oxides, Lead, Copper and its alloys, Nickel, galvanized surfaces and Aldehydes.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

Personal Protective Equip:

Eye/face protection: When using material use safety glasses and gloves according to HMIS PP, B. All safety equipment should be tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection: Handle with gloves made from Neoprene, Nitrile or Buna rubber. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact. Dispose of contaminated gloves according to applicable laws and laboratory practices.

Body Protection: Chemically resistant gloves, and safety glasses are recommended. Type of protective equipment should be selected based on concentration amount and conditions of use of this material.

Respiratory protection: Full-face vapor respirator may be required as backup to engineering controls when proper engineering controls are not in place to keep TLV and PEL limits below defined thresholds.

Control of environmental exposure: Prevent leakage or spillage if safe to do so. Do not let material enter drains.

Components with workplace control parameters:

Component(s): 2-Butoxyethanol; Phosphoric acid, trisodium salt

CAS No(s): 111-76-2; 7601-54-9

USA NIOSH (TWA/REL): 24 mg/m³

USA ACGIH (TWA/TLV): 96 mg/m³

USA OSHA - Table Z-1 Limits for Air Contaminants (TWA): 120 mg/m³

USA OSHA Occupational Exposure Limits Table Z-1 Limits for Air Contaminants (TWA): 240 mg/m³

USA Workplace Environmental Exposure Levels (WEEL/STEL): 5 mg/m³

Biological occupational exposure limits:

Component: 2-Butoxyethanol

CAS-No: 111-76-2

Parameters: Butoxyacetic acid (BAA) Biological Specimen: Urine

USA ACGIH Biological Exposure Indices: 200 mg/g

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, green liquid

Physical State: Liquid

Odor Threshold: Not determined

Particle Size: Not determined

Spec Grav./Density: 1.040 g/ml (8.68 lbs/gal)

Viscosity: Not determined
Sat. Vap. Conc.: Not determined
Boiling Point: 100.6 °C (213 °F)
Flammability: (solid, gas): Not determined
Partition Coefficient: Not determined
Vapor Pressure: (mm Hg @ 25 °C): Not determined
pH: @ 1%: 12.7
Evap. Rate: (N-Butyl Acetate = 1): Not determined
Molecular weight: MIXTURE
Decomp Temp: Not determined

Odor: Pleasant
Molecular Formula: MIXTURE
Solubility: 100%
Softening Point: Not determined
Percent Volatile: 5.76%
Heat Value: Not determined
Freezing/Melting Pt.: Not determined
Flash Point: DNA
Octanol: Not determined
Vapor Density: (air = 1): Not determined
VOC: 52 g/l
Bulk Density: Not determined
Auto-Ignition Temp: Not determined
UFL/LFL: Not determined

10. STABILITY AND REACTIVITY

Stability: Product is stable under normal conditions.

Conditions to Avoid: Incompatibilities, flames, ignition sources.

Materials to Avoid: Strong acids, strong bases, strong oxidizing agents, strong reducing agents, reactive metals (Zinc & Aluminum) and their alloys (Brass, etc.), Alkali metals, powdered metals, organic materials, chlorinated solvents, Phosphorous, Tin/Tin oxides, Lead, Copper and its alloys, Nickel, galvanized surfaces and Aldehydes.

Hazardous Decomposition: Carbon Oxides, Nitrogen Oxides (NO_x), Phosphorous Oxides, Silicon Oxides and Sodium Oxides.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Component(s): 2-Butoxyethanol; Phosphoric acid, trisodium salt; Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-; Silicic acid (H₂SiO₃), disodium salt; Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, mono-C8-10-alkyl ethers, phosphates

CAS No(s): 111-76-2; 7601-54-9; 9016-45-9; 6834-92-0; 68130-47-2

Acute Toxicity:

LD50 Oral - Rat: 470 mg/kg

LD50 Dermal - Rabbit: 220 mg/kg LD50 Intraperitoneal - Rat: 220 mg/kg LD50 Intravenous - Rat: 307 mg/kg LC50 Inhalation - Rat: 2175 mg/m³ (4 h)

Skin Corrosion/Irritation: Rabbit skin - Corrosive (4 h).

Serious Eye Damage/Eye Irritation: Rabbit eyes - Severe eye irritation.

Respiratory or Skin Sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ Cell Mutagenicity: No data available.

Carcinogenicity:

This product is or contains components that are classifiable as to their carcinogenicity based on their IARC, ACGIH, NTP, or OSHA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (2-Butoxyethanol).

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: Oral - Rat: Effects on newborn (Live birth index, Weaning or lactation index). **Specific Target Organ**

Toxicity - Single Exposure: Respiratory system - May cause respiratory irritation. **Specific Target Organ Toxicity - Repeated**

Exposure: No data available.

Aspiration Hazard: No data available.

Additional Information:

Component: 2-Butoxyethanol; RTECS: KJ8575000

Component: Phosphoric acid, trisodium salt; RTECS: TC9490000

Component: Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-; RTECS: AX0247000

Component: Silicic acid (H₂SiO₃), disodium salt; RTECS: VV9275000

Component: Poly(oxy-1,2-ethanediyl), .alpha.-hydro.-omega.-hydroxy-, mono-C8-10-alkyl ethers, phosphates; RTECS: 1001516AS

12. ECOLOGICAL INFORMATION

Component(s): 2-Butoxyethanol; Phosphoric acid, trisodium salt; Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-; Silicic acid (H₂SiO₃), disodium salt; Poly(oxy-1,2-ethanediyl), .alpha.-hydro.-omega.-hydroxy-, mono-C8-10-alkyl ethers, phosphates

CAS No(s): 111-76-2; 7601-54-9; 9016-45-9; 6834-92-0; 68130-47-2

Toxicity:

Toxicity to fish:

LC50 - Lepomis macrochirus (Bluegill Sunfish): 1.0 mg/l (96 h) LC50 - Gambusia affinis (Western Mosquitofish): 28.5 mg/l (96 h)

LC50 - Oncorhynchus mykiss (Rainbow Trout): 5.5 mg/l (96 h)

Mortality LOEC - Pimephales promelas (Fathead Minnow): 2.0 mg/l (144 h) Mortality NOEC - Pimephales promelas (Fathead Minnow): 1.8 mg/l (144 h)

Toxicity to daphnia and other aquatic invertebrates:

EC50 - Daphnia magna (Water Flea): 12.2 - 17.0 mg/l (48 h) Mortality NOEC - Daphnia magna (Water Flea): 10.0 mg/l (144 h)

Mortality LOEC - Daphnia magna (Water Flea): 20.0 mg/l (144 h)

Toxicity to algae:

Growth Inhibition LOEC - Pseudokirchneriella subcapitata: 16.0 mg/l (96 h) Growth Inhibition NOEC - Pseudokirchneriella subcapitata: 8.0 mg/l (96 h)

Persistence and Degradability:

No data available.

Bioaccumulative potential:

No data available.

Mobility in Soil:

No data available.

Results of PBT and vPvB assessment:

Not required/conducted.

Other Adverse Effects:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

Product: Hazardous wastes shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution, release into the environment or damage to people and animals. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated Packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Non-regulated material, liquid

IMDG

Non-regulated material, liquid

IATA

Non-regulated material, liquid

15. REGULATORY INFORMATION

COMPONENT / (CAS/PERC) / CODES

*2-Butoxyethanol (111762 1-5%) HAP, MASS, NJHS, OSHAWAC, PA, SARA311/312, SARA313, TSCA, TXAIR

*Phosphoric acid, trisodium salt (7601549 1-5%) CERCLA, CSWHS, MASS, NJHS, PA, SARA311/312, TSCA

*Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy- (9016459 1-5%) NJHS, PA, SARA311/312, TSCA

*Silicic acid (H₂SiO₃), disodium salt (6834920 1-5%) NJHS, PA, SARA311/312, TSCA

*Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, mono-C8-10-alkyl ethers, phosphates (68130472 1-5%) TSCA

REGULATORY KEY DESCRIPTIONS

CERCLA = Superfund cleanup substance

CSWHS = Clean Water Act Hazardous substances

HAP = Hazardous Air Pollutants

MASS = MA Massachusetts Hazardous Substances List

NJHS = NJ Right-to-Know Hazardous Substances

OSHA WAC = OSHA Workplace Air Contaminants

PA = PA Right-To-Know List of Hazardous Substances

SARA311/312 = SARA 311/312 Toxic Chemicals

SARA313 = SARA 313 Title III Toxic Chemicals

TSCA = Toxic Substances Control Act

TXAIR = TX Air Contaminants with Health Effects Screening Level

16. OTHER INFORMATION

Disclaimer:

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material in any process. The information set forth herein is furnished free of charge and is based on technical data that Titan Laboratories believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside of Titan Laboratories' control, Titan Laboratories makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe upon, any patents.