SAFETY DATA SHEET

Issue Date 30-Sep-2015 Revision Date Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name GREEN PINE

Other means of identification

SDS# 46211

Details of the supplier of the safety data sheet

Company Name TITAN INDUSTRIAL CHEMICALS, LLC

P.O. BOX 635 GROVER, MO. 63040 636-273-9033

Emergency telephone number

Emergency Telephone INFOTRAC 1-800-535-5053

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Serious eye damage/eye irritation	Category 2

Label elements

Emergency Overview

Warning

Hazard statements

Causes serious eye irritation



Appearance Clear Physical state Liquid Odor Pine

Precautionary Statements - Prevention

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

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

Hazards not otherwise classified (HNOC)

Other Information

Harmful to aquatic life with long lasting effects

Unknown Acute Toxicity 14.9822% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Pine Oil	8002-09-3	10-30	*
2-Propanol	67-63-0	7-13	*

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

4. FIRST AID MEASURES

First aid measures

Skin Contact Wash off immediately with plenty of water. Wash skin with soap and water.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Inhalation Remove to fresh air.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms Any additional important symptoms and effects are described in Section 11: Toxicology

Information.

Indication of any immediate medical attention and special treatment needed

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

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

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No Information available.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge 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, especially in confined areas.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning upPick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

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

Incompatible materialsNone known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Exposure guidelines noted for ingredient(s).

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-Propanol	STEL: 400 ppm	TWA: 400 ppm	IDLH: 2000 ppm
67-63-0	TWA: 200 ppm	TWA: 980 mg/m ³	TWA: 400 ppm
		(vacated) TWA: 400 ppm	TWA: 980 mg/m ³
		(vacated) TWA: 980 mg/m ³	STEL: 500 ppm
		(vacated) STEL: 500 ppm	STEL: 1225 mg/m ³
		(vacated) STEL: 1225 mg/m ³	
Sodium Hydroxide	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	IDLH: 10 mg/m ³
1310-73-2		(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d

962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Showers, Eyewash stations & Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

Skin and body protection No special technical protective measures are necessary. Wear protective gloves and

protective clothing if needed.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid
Appearance Clear
Color Amber
Odor Pine

Odor threshold No Information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 8.0 - 9.0 **Specific Gravity** .975

Viscosity Slightly greater than water **Melting point/freezing point** No Information available

Flash point Above 200°F

Boiling point / boiling range >= 212 ° F (at 760 mm Hg)

Evaporation rate No Information available

Flammability (solid, gas) No data available

Flammability Limits in Air

Upper flammability limit:No Information availableLower flammability limit:No Information availableVapor pressureNo Information availableVapor densityNo Information available

Water solubility Complete

Partition coefficientNo Information availableAutoignition temperatureNo Information availableDecomposition temperatureNo Information available

Other Information

Density Lbs/Gal 8.13 VOC Content (%) 10.6

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

Extremes of temperature and direct sunlight.

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

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Product Information

Inhalation No data available. Avoid breathing vapors or mists.

Eye contact Causes serious eye irritation. Avoid contact with eyes.

Skin Contact No data available. Avoid contact with skin.

Ingestion No data available. Do not taste or swallow. Not an expected route of exposure.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Pine Oil	= 3200 mg/kg (Rat)	= 5 g/kg (Rabbit)	-
8002-09-3			
2-Propanol	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h
67-63-0			

Information on toxicological effects

Symptoms No Information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

SensitizationNo Information available. **Germ cell mutagenicity**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-Propanol	-	Group 3	-	X
67-63-0				

Legend

IARC (International Agency for Research on Cancer)

Group 3 -Not classifiable as a human carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
Aspiration hazard

No Information available.
No Information available.
No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 14.9822% of the mixture consists of ingredient(s) of unknown toxicity

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

ATEmix (oral) 8,626.00 mg/kg
ATEmix (dermal) 16,067.00 mg/kg
ATEmix (inhalation-dust/mist) 582.30 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

14.9822% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Pine Oil	-	-	17 - 28: 48 h Daphnia magna mg/L
8002-09-3			EC50 Flow through
2-Propanol	1000: 96 h Desmodesmus	1400000: 96 h Lepomis macrochirus	13299: 48 h Daphnia magna mg/L
67-63-0	subspicatus mg/L EC50 1000: 72 h	μg/L LC50 11130: 96 h Pimephales	EC50
	Desmodesmus subspicatus mg/L	promelas mg/L LC50 static 9640: 96	
	EC50	h Pimephales promelas mg/L LC50	

		flow-through	
Tetrasodium EDTA 64-02-8	1.01: 72 h Desmodesmus subspicatus mg/L EC50	59.8: 96 h Pimephales promelas mg/L LC50 static 41: 96 h Lepomis	610: 24 h Daphnia magna mg/L EC50
		macrochirus mg/L LC50 static	
Sodium Hydroxide	-	45.4: 96 h Oncorhynchus mykiss	-
1310-73-2		mg/L LC50 static	
Trisodium nitrilotriacetate	560 - 1000: 96 h Chlorella vulgaris	72 - 133: 96 h Oncorhynchus	560 - 1000: 48 h Daphnia magna
5064-31-3	mg/L EC50	mykiss mg/L LC50 static 175 - 225:	mg/L LC50
		96 h Lepomis macrochirus mg/L	
		LC50 static 252: 96 h Lepomis	
		macrochirus mg/L LC50 470: 96 h	
		Pimephales promelas mg/L LC50	
		static 93 - 170: 96 h Pimephales	
		promelas mg/L LC50 flow-through	
		560 - 1000: 96 h Poecilia reticulata	
		mg/L LC50 semi-static 560 - 1000:	
		96 h Poecilia reticulata mg/L LC50	
		114: 96 h Pimephales promelas	
		mg/L LC50 560 - 1000: 96 h Oryzias	
		latipes mg/L LC50 560 - 1000: 96 h	
		Oryzias latipes mg/L LC50 semi-	
		static	

Persistence and degradability

No Information available.

Bioaccumulation

No Information available.

Chemical Name	Partition coefficient
2-Propanol	0.05
67-63-0	

Other adverse effects No Information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

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

Chemical Name	California Hazardous Waste Status
2-Propanol	Toxic
67-63-0	Ignitable

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

<u>Poot</u>

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

15. REGULATORY INFORMATION		
International Inventories		
TSCA	Complies	

DSL/NDSL

Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

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	SARA 313 - Threshold Values %
2-Propanol - 67-63-0	1.0
SARA 311/312 Hazard Categories	
Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

WARNING: This product contains a chemical known to the state of California to cause cancer.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Pine Oil 8002-09-3	X	-	-
2-Propanol 67-63-0	Х	Х	Х
Sodium Hydroxide 1310-73-2	X	Х	X
Trisodium nitrilotriacetate 5064-31-3	-	Х	-

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

NFPA Health hazards 1 Flammability 0 Instability 0 Physical and Chemical Properties Yes

HMIS Health hazards 1* Flammability 0 Physical hazards 0 Personal protection X

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No Information available

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet