

Material Safety Data Sheet

Product name: Titania Total Surface

1. Chemical product and company identification

Product name: Titania Total Surface
 Product description: Water based surface preservative
 Company name: Granite Marketing Inc.
 Address: 8194 W. Deer Valley Rd.
 Ste. 106-260
 Peoria, AZ 85382
 Telephone: 860-877-2594
 Facsimile: 860-371-3133

Date issued: January 22, 2015

2. Composition / Information on ingredients

Classification of chemical substance/mixture: Mixture

Components and contents: Titania series chemical compound solution

Substance name	Content (%)	Poisonous and Deleterious Substances Control Law No.	Industrial Safety and Health Law No.	PRTR Law No.	CAS No.
Phosphoric Acid Titania	Less than 0.1	Not applicable	1-525	Not applicable	13765-94-1
Isopropyl Alcohol	Less than 0.1	Not applicable		Not applicable	67-63-0
Water	Non-disclosure	Not applicable	-	Not applicable	773-18-5

3. Hazards identification

Most important hazards

Hazards: Aspiration of vapor acts as anesthetic. Repeated exposure may cause mucous membrane irritation, dryness.

Environmental impact: Product has good biodegradability.

Physical or chemical hazard: None.

Description of classification: Non-flammable substance.

4. First aid measures

Eye contact:	Immediately flush eyes with running water thoroughly, If there is abnormality, submit to medical treatment.
Skin contact:	Immediately flush skin at contact area with running water and soap thoroughly, If there is abnormality, submit to medical treatment.
Inhalation:	Remove to fresh air, and then make the person blow nose and gargle with water. If necessary, submit medical treatment.
Ingestion:	Thoroughly rinse the affected area with a plenty of water and soap. If a problematic symptom occurs, then seek medical attention.
In case of contact with eye:	Thoroughly rinse eye with a plenty of clean running water, and then seek medical attention.
When swallowed:	Thoroughly rinse mouth with a plenty of water and spit out, and then seek medical attention.

5. Fire-fighting measures

Flammability classification:	Non-Flammable, non-combustable.
Flammable limits:	This product is non-flammable.
Flash point:	None.

6. Accidental release measures

- In the event of a small spill, remove the released product by absorbing with sawdust, wastecloth, etc. Then wipe off any remaining residue thoroughly with waste cloth.
 - Take care to prevent the spilled product from entering sewage systems, etc.
 - Be careful not to slip, as the problem zone is slippery.
-

7. Handling and storage

Handling

Safe handling practice: Use in a well-ventilated place.

After handling the material, thoroughly rinse hands and change the work clothing if contaminated.

Storage

Appropriate storage conditions: Keep containers securely sealed when not in use. Avoid direct sunlight, high temperature, high humidity, and possible freezing of the product. Store in a cool, dark, well-ventilated place.

8. Exposure controls / Personal protection

Protection by equipment:	None in particular
Administrative control level:	200 ppm (isopropyl alcohol)
Allowable concentration	
OSHA(2006ver.):	400 ppm (isopropyl alcohol)
ACGIH(2005ver.):	TLV-TWA; 200ppm, TLV-STEL; 400ppm (isopropyl alcohol)
Protective equipment	
Respiratory protection:	Not necessary
Hand protection:	Not necessary
Eye protection:	Not necessary
Skin and body protection:	Not necessary

9. Physical and chemical properties

Appearance:	Colorless clear liquid
Odor:	Slight alcoholic odor
pH:	10–11
Melting point / solidifying point:	No data available
Boiling point, initial boiling point and boiling range:	212° F
Flash point:	This product itself is non-combustible.
Ignition point:	This product itself is non-combustible.
Range of inflammability or range of explosion:	This product itself is non-combustible.
Vapor pressure:	No data available
Vapor density:	No data available
Specific gravity:	No data available
Solubility:	Soluble in water and alcohol
Octanol water partition coefficient:	No data available
Decomposition temperature:	No data available

10. Stability and reactivity

Stability:	Stable under ordinary handling conditions
------------	---

11. Toxicological information

Acute toxicity:	Rat (oral)	LD ₅₀	☒ 2,000mg/kg
Dermal corrosion/irritation:	No irritation has been observed in rabbits in the skin irritation test. No abnormal reaction has appeared in the skin patch test in healthy volunteers.		
Severe damage/irritation to eye:	No irritation has been observed in rabbits in the eye irritation test.		
Respiratory or skin sensitivity:	No skin sensitization has been induced in the guinea pig skin sensitization test.		
Germ cell mutagenicity:	Negative		

12. Ecological information

<As isopropyl alcohol>

Water environment acute hazard:	Fish: water mosquito fish, LC ₅₀ > 100mg/L/96h The material has been excluded from the classification.
Water environment chronic hazard:	The material has been excluded from the classification, as it is not poorly water-soluble (water solubility=1.00 ☒ 10 ⁶ mg/L) and it's acute toxicity is low.

13. Disposal considerations

- Commission an authorized industrial waste disposal agent to do the disposal work.
 - Strictly observe the currently effective environmental protection laws and regulations.
-

14. Transport information

- Observe the general instructions in section 7.
 - Check that the containers are free from leakage. Load the containers in the transport such that they will not fall, drop or be damaged, and secure them to positively prevent collapse of cargo.
 - Strictly observe the provisions of the Department of Transportation regulations.
-

15. Regulatory information

Fire Law:	Non- hazardous substance
Poisonous and Deleterious Substances Control Law:	Not applicable
Industrial Safety and Health Law:	Substances to be notified in MSDS (Isopropyl alcohol, Acetic acid)
PRTR Law:	Not applicable
Water Pollution Control law (living environment items):	Not applicable (due to a phosphorus content of 16 mg/L or less)