

Titan™

SAFETY DATA SHEET

Preparation Date: 27-Oct-2020

Revision Date: 04-Nov-2020

Revision Number: 1

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

Product Identifier

Product Name Titan™

Other means of identification

Item#: 1159

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Spray Teat Dip

Uses advised against All other

Details of the supplier of the safety data sheet

Supplier DeLaval Manufacturing
11100 N. Congress Ave.
Kansas City, MO 64153 : 816-891-7700, 8am – 5pm M-F

Emergency Telephone Number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

Serious eye damage/eye irritation	Category 2
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Label Elements

Emergency Overview

WARNING

Hazard Statements

Causes serious eye irritation



Appearance Green

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

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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Glycerol	56-81-5	1 - 10
Lactic acid	79-33-4	1 - 10

If a concentration range is shown, the exact concentration has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first-aid measures

Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention immediately.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.
Inhalation	Move to fresh air. Get medical attention immediately if symptoms occur.
Ingestion	Do not induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Serious eye damage/eye irritation.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

The product is not flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

None known.

Specific hazards arising from the chemical

The product causes irritation of eyes, skin and mucous membranes.

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.

NFPA **Health hazards** 1 **Flammability** 0 **Instability** 0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes. For personal protection see section 8.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Should not be released into the environment.

Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

Incompatible Materials bases, light metals (e.g. aluminum, copper, brass, zinc galvanized), bleach

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Glycerol 56-81-5		TWA: 10 mg/m ³ TWA: 5 mg/m ³ TWA: 15 mg/m ³	-

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face Protection Safety glasses with side-shields.

Skin and body protection Wear protective gloves and protective clothing.

Respiratory Protection In case of inadequate ventilation wear respiratory protection.

General Hygiene Considerations 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	Odor	No information available
Appearance	Green	Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	2.9 - 3.3	
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit	No information available	
Lower flammability limit	No information available	
Vapor Pressure	No information available	

Vapor Density	No information available
Specific Gravity	1.033
Water Solubility	soluble
Partition coefficient: n-octanol/water	No information available
Autoignition Temperature	No information available
Decomposition temperature	No information available
Viscosity of Product	10-20 cP
Dynamic viscosity	No information available

Other information

Liquid Density	1.031 g/mL
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10. STABILITY AND REACTIVITY

Reactivity

May react with other chemicals. Do not mix with other chemicals except as directed on label.

Chemical Stability

stable when stored at temperatures not exceeding 80°F. Long-term storage at higher temps may degrade product over time.

Possibility of hazardous reactions

None known.

Conditions to Avoid

Product may degrade if exposed to long-term high temperature.

Incompatible Materials

bases, light metals (e.g. aluminum, copper, brass, zinc galvanized), bleach

Hazardous decomposition products

None known.

11. TOXICOLOGICAL INFORMATION

Principal Routes of Exposure Eye contact, Skin contact, Ingestion

Information on likely routes of exposure

Eyes	Causes serious eye irritation.
Skin	May cause slight irritation.
Ingestion	Ingestion may cause irritation to mucous membranes.

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

Serious eye damage/eye irritation	Causes serious eye irritation.
Sensitization	Product is not identified as a sensitizer according to OSHA regulations.
Mutagenic effects	Product is not identified as a mutagen according to OSHA regulations.
Carcinogenicity	Product is not identified as a carcinogen according to OSHA regulations.

Reproductive Effects	Product is not identified as having reproductive effects according to OSHA regulations.
STOT - single exposure	Product is not identified as having single target organ toxicity (single exposure) according to OSHA regulations.
STOT - repeated exposure	Product is not identified as having single target organ toxicity (repeated exposure) according to OSHA regulations.
Aspiration Hazard	Product is not identified as an aspiration hazard according to OSHA regulations.

Numerical measures of toxicity

If available, toxicity values of individual components are shown below.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Glycerol 56-81-5	= 12600 mg/kg (Rat)	21900 mg/kg (Rat)	> 570 mg/m ³ (Rat) 1 h
Lactic acid 79-33-4	= 3730 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	No data available

0% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

If available, ecotoxicity values of individual components are shown below.

Chemical name	Algae/aquatic plants	Fish	Microtox	Waterflea
Glycerol 56-81-5	No data available	51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static	No data available	500: 24 h Daphnia magna mg/L EC50
Lactic acid 79-33-4	3.5: 70 h Pseudokirchneriella subcapitata mg/L EC50	100 - 180: 96 h Lepomis macrochirus mg/L LC50 static 100 - 180: 96 h Oncorhynchus mykiss mg/L LC50 static 320: 96 h Brachydanio rerio mg/L LC50 semi-static	LC50: >88.2 mg/L 3h	240: 48 h Daphnia magna mg/L EC50 180 - 320: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method

Contact your local waste disposal authority for advice, or pass to a chemical disposal company.

Contaminated Packaging

Triple rinse containers. Avoid contamination of any water supply with product or empty packaging. Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

DOT

Not regulated

15. REGULATORY INFORMATION

State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Glycerol 56-81-5	X	X	X

U.S. EPA Label information

EPA Pesticide registration number Not applicable

16. OTHER INFORMATION

Preparation Date: 27-Oct-2020

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Revision Note: None

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 SDS