TITAN®

Safety Data Sheet

EMERGENCY PHONE: 800-553-8011 Effective date: 11/04/2015 Print date: 11/4/2015

NFPA: Health 1, Fire 0, Reactivity 0

1. IDENTIFICATION

PRODUCT NAME: TITAN®
CAS #: MIXTURE

MANUFACTURER: OSSIAN INC., 635 SOUTH ELMWOOD AVE, DAVENPORT, IOWA 52802
EMERGENCY PHONE: 800-553-8011

PRODUCT USE: Melting of Ice
USES ADVISED AGAINST: De-icing of concrete less than one year old. De-icing of metal surfaces.

ADDITIONAL INFORMATION: CONSUMER PRODUCTS: When package in quantities of 100 lbs or less, and used in a manner and frequency typical of consumer use, Ossian considers this product a consumer use product which is regulated by the Consumer Product Safety Commission (CPSC). Because CPSC labeling requirements differ from the Occupational Safety and Health Administration (OSHA) GHS requirements for safety data sheets (SDS), slight differences in hazard information between the product label and SDS may be observed.

2. HAZARD(s) IDENTIFICATION:

GHS CLASSIFICATION OF MIXTURE:

CONTACT HAZARD – SKIN:	Category 3 – Mild skin irritation.
CONTACT HAZARD – EYE:	Category 2B – Mild irritant.
ACUTE TOXICITY – INHALATION:	No data available. Not classified.
ACUTE TOXICITY – ORAL:	Category 4 – Harmful if swallowed.
ACUTE TOXICITY – DERMAL:	Category 5 – May be harmful in contact with skin
CARCINOGENICITY:	Not classified as a carcinogen per GHS criteria. Not classified as a carcinogen by NTP, IARC, or OSHA

GHS LABELING PICTOGRAM:



GHS SIGNAL WORD:

WARNING

HAZARD STATEMENT: Non-toxic. No adverse health effects are anticipated with normal use of this product.

PRECAUTIONARY STATEMENT:

EYE CONTACT:	Low irritant. Exposure may result in mild irritation. Can cause redness and pain.
INHALATION:	Low irritant – nuisance dust. Over exposure to dust may result in upper respiratory tract irritation.
SKIN CONTACT:	Low irritant. Prolonged and repeated contact with concentrate may result in slight irritation and dryness of skin to individuals with sensitive skin.
INGESTION:	Non-toxic in trace amounts. If ingested in large quantities seek medical attention.

OTHER HAZARDS: No other hazards known

3. COMPOSITION

SUBSTANCE/MIXTURE: Mixture.

CHEMICAL NAME	PERCENTAGE	CAS NUMBER
Sodium Chloride	> 98	007647-14-5
Polymeric Colorant	< 1	N/A
Accelerating Agent(s)	< 1	N/A

TECHNOLOGY: Chemical properties of accelerating agents have been withheld as a trade secret. Accelerating agents covered under U.S. Patent – additional patents may be pending.

4. FIRST-AID MEASURES:

FIRST AID INHALATION: Remove to fresh air. Get medical attention for any breathing difficulty.

FIRST AID SKIN: Wash with soap and water. Obtain medical attention if irritation persists.

FIRST AID EYE: Flush gently with running water for at least 15 minutes.

FIRST AID INGESTION: If large amounts were swallowed give water to drink and get medical advice. Never give anything by mouth to an unconscious or convulsive person.

5. FIRE-FIGHTING MEASURES:

EXTINGUSHING MEDIA: Use extinguishing agents appropriate for surrounding fire.

FIRE HAZARD: This material does not burn. Not considered to be a fire hazard.

EXPLOSION: Not considered to be an explosion hazard.

PRODUCTS OF COMBUSTION: Decomposes when heated to temperatures above 801 degrees C. May release toxic fumes of chlorine and sodium oxides.

6. ACCIDENTAL RELEASE MEASURES:

SMALL SPILLS: Incorrect application of this product from its intended uses is not expected to be harmful to the environment.

LARGE SPILLS: Avoid contamination of drinking water, natural waterways, or ground water supply. Incorrect application of this product from its intended uses is not expected to be harmful to the environment.

CLEAN UP: Small and large spills: Contain spilled material if possible. Collect in suitable and properly labeled containers. Flush residue with plenty of water. See Section 13, Disposal Considerations, for additional information.

ECOTOXICITY DATA: Maybe harmful to fresh water aquatic species and to plants that are not saline tolerant.

DISPOSAL METHOD: Waste must be disposed of in accordance with federal, state/provincial and local environmental control regulations. Flush residue with plenty of water.

7. HANDLING AND STORAGE:

HANDLING PROCEDURES: Avoid contact with skin and eyes, wash hands with soap and water after handling if required.

STORAGE: Store in cool, dry well-ventilated area, removed from acids. Ensure packaging is adequately labeled and protected from physical damage.

Incompatible with sulphuric and nitric acids, caustics, but no other critical requirements.
Will corrode uncoated metal in storage location.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION (Calcium Chloride):

VENTILATION CONTROLS: In general, dilution ventilation is a satisfactory health hazard control however if conditions create discomfort to the worker then a local exhaust system should be considered.

PERSONAL PROTECTION: Dust goggles, long sleeves and trousers, gloves.

SKIN PROTECTION: Wear protective gloves and a clean body covering clothing.

EYE PROTECTION: Use dust goggles. Maintain all eyewash stations and quick drench facilities in work area.

RESPIRATORY: NIOSH approved filtering face piece may be necessary

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE (PHYSICAL STATE, COLOR, ETC)	Blue colored crystalline solid
ODOR:	Odorless
ODOR THRESHOLD:	NA
pH (5% SOLV/WATER):	6 to 8 (Neutral)
MELTING/FREEZING POINT:	800.9°C (1473.6°F)
INITIAL BOILING POINT:	1413°C (2575.4°F)
FLASH POINT:	NA
EVAPORATION RATE:	Not applicable
FLAMMABILITY:	NA
UPPER FLAMMABILITY LEVEL (air):	NA
LOWER FLAMMABILITY LEVEL (air):	NA
VAPOR PRESSURE:	0.1 kpa (1mm hg) (at 865°C)
VAPOR DENSITY (air=1):	Not applicable
SPECIFIC GRAVITY (water=1):	2.165 (WATER = 1)
SOLUBILITY:	Readily soluble in water
PARTITION COEFFICIENT: N-OCTANOL/WATER	NA
AUTO-IGNITION TEMPERATURE:	NA
DECOMPOSITION TEMPERATURE:	NA
VISCOSITY:	NA

10. STABILITY & REACTIVITY:

REACTIVITY:	NA
CHEMICAL STABILITY:	Stable.
CONDITIONS TO AVOID:	None known.
POSSIBILITY OF HAZAROUS REACTIONS:	NA
INCOMPATIBILE MATERIALS:	Reactive with oxidizing agents, acids, lithium, and bromine trifluoride.
HAZARDOUS DECOMPOSITION PRODUCTS:	When heated to above 801 °C it emits toxic fumes of chlorine and sodium oxide.
HAZARDOUS POLYMERIZATION:	Will not occur.

11. TOXICOLOGICAL INFORMATION;

ROUTES OF ENTRY:	Inhalation, Ingestion
ACUTE:	Ingestion in large amounts (greater than 0.5 kg) can cause gastrointestinal upset and irritation of the stomach with nausea and vomiting. May affect behavior, sense organs, metabolism and cardiovascular system. Continued exposure may produce dehydration, internal organ congestion. The material can be irritating to the mucous membranes and upper respiratory tract.
CHRONIC:	In severe cases Sodium Chloride can cause damage to kidneys, raise blood pressure, heartburn, osteoporosis, gastric cancers, and ventricular hypertrophy.

12. ECOLOGICAL INFORMATION;

The product itself and its products of degradation are not toxic.

ENVIRONMENT:	This product is not anticipated to cause adverse effects to animal or plant life if released to the environment in small quantities. Not expected to bioaccumulate. Solution is highly saline and large spills could potentially cause flora mortality.

13. DISPOSAL CONSIDERATIONS: (See Section 14 for Regulatory Information)

Reuse or recycle if possible. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Report spills if applicable. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED &

UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Landfill and waste water treatment system.

14. TRANSPORT INFORMATION:

UNITED STATES DOT INFORMATION:
This product is not regulated by D.O.T. when shipped domestically by land.

CANADIAN TDG INFORMATION:
This product is not regulated by T.D.G. when shipped domestically by land.

15. REGULATORY INFORMATION: (Not meant to be all-inclusive- selected regulations represented)

D.O.T. PROPER SHIPPING NAME:	N/A
HAZARDOUS SUBSTANCE 49CFR CERCLA:	N/A
D.O.T. HAZARD CLASS	N/A
D.O.T. LABELS REQUIRED	N/A
D.O.T. PLACARDS REQUIRED	N/A

16. OTHER INFORMATION:

ADDITIONAL HEALTH DATA COMMENT:
This Safety Data Sheet contains environmental, health and toxicological information for your employees. Please make sure this information is given to them. It also contains information to help you meet community right-to-know / emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this SDS must be given to the buyer or the information incorporated in your SDS. Discard any previous edition of this SDS.
Latest version of this SDS can be found at http://www.OSSIAN.com or by contacting **icemelt@ossian.com**

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