



# MSDS

Material Safety Data Sheet  
November 7, 2007

## **Section 01: Chemical Product Identification**

Domestic Trade Name: Titan ASD 200 Liquid™

Export Trade Name: Titan ASD 200 Liquid™

Chemical Type: Water Soluble Polymer

## **Section 02: Information on Hazardous Ingredients**

Non-Hazardous Ingredients

## **Section 03: Hazards Identification**

### ***Health Hazards:***

Primary Route of Exposure: Skin contact, eye contact, and inhalation

Inhalation: Exposure to spray may cause irritation to the mucous membranes and respiratory system

Skin Contact: Exposure to skin can cause irritation

Eye contact: Material can cause irritation to eyes

Ingestion: Material is not harmful if accidentally ingested

***Medical Conditions Aggravated by Exposure:*** None known

## **Section 04: First Aid Measures**

First Aid For Ingestion: If swallowed give 2 glasses of water to drink. Seek medical attention immediately.

Never give anything by mouth to an unconscious person.

First Aid Inhalation: Remove to Fresh Air. In case of shortness of breath call a physician immediately.

First Aid Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention immediately.

First Aid Skin Contact: Wash exposed area with soap and water immediately. Remove and wash contaminated clothing.

## **Section 05: Fire Fighting Measures**

Autoignition Temp: N/A

Flammable Limits: LEL (Lower Explosive Limits) – Not applicable

Flammable Limits: UEL (Upper Explosive Limits) – Not applicable

Flash Point: Not applicable

Fire Fighting Media: Use media appropriate to primary cause of fire

Special Fire Fighting Procedures: None known

Fire/Explosion Hazards: None known

Special Procedures: Use water spray to cool containers exposed to fire. Minimize exposure. Do not breathe fumes. Contain run-off.

## **Section 06: Accidental Release Measures**

Spill/Leak Clean-Up Procedures: If possible neutralize with alkaline soap.

***Land Spill:*** Wearing recommended protective clothing and equipment, dike spill with soil, sand, or compatible commercial absorbent. Remove remaining liquid with a pump, vacuum truck, or absorb liquid in sand or commercial absorbent. Place waste in approved containers for disposal. Dispose waste according to Federal, State, and local regulations.

**Water Spill:** Wear protective clothing and equipment. Stop flow. Dike contaminated water and remove for disposal and/or treatment. Notify proper authorities and all downstream users if possible. Dispose of with Solid Waste according to Federal, State, and Local Regulations.

**\*CAUTION:** Floor will be Slippery

*Personal protection:*

Wear a NIOSH approved (or equivalent) respirator (with an organic/acid gas cartridge and a dust filter) during spill clean up and deactivation of the material. Protective clothing including chemical splash goggles, Latex, nitrile, or buytl rubber full-length gloves, rubber apron made of nitrile or buytl rubber, and rubber overshoes must be worn during spill clean-ups and deactivation of material. If this material comes

into contact with the skin during clean-up operations, immediately remove all contaminated clothing and wash exposed skin areas with soap and water. See section 4, First Aid Measures, for further information.

**Section 07: Handling and Storage**

*Precautionary Measures:*

Avoid Breathing Spray. See Section 8, Exposure Control/Personal Protection, prior to handling.

*Storage Conditions:*

The maximum storage temperature for this material is 55°C/131°F. The minimum storage temperature for this material is 0°C/32°F. Store in a well ventilated area. Do not store this material in containers made of steel.

**Section 08: Exposure Control/Personal Protection**

Ventilation: Use local exhaust ventilation at the point of dust or mist evolution

Respiratory Protection: Dust masks where spraying cannot be avoided

Eye Protection: Safety glasses, splash goggles, and/or face shields (ANSI Z87.1 or approved equivalent)

Skin Protection: Use latex, neoprene, or rubber gloves, boots, and apron. Remove gloves after use. Wash hands with soap and water.

Personal Hygiene: Observe ordinary measures of personal hygiene

**Section 09: Physical and Chemical Properties**

Boiling Point: That of Water

Vapor Pressure: That of Water

Vapor Density: That of Water

Water Solubility: Complete

Melting/Freezing Point: 32 °F

Appearance: Clear to light amber

Specific Gravity: 1.0 – 1.2 g/ml

Percentage Volatile: 30%

Evaporation Rate: That of Water

pH of Solution: 2.0 – 3.5

Odor: Mild

**Section 10: Stability and Reactivity**

Stability: This material is considered stable under specific conditions of storage, shipment, and/or use. See

Section 7, Handling and Storage, for specific conditions.

Hazardous Polymerization: Will not occur

Conditions to Avoid: None Known

Incompatible Materials: Strong Oxidizing or Reducing Agents

Hazardous Decomposition Products: None Known

## **Section 11: Toxicological Information**

### *Acute Toxicity:*

Mutagenicity: AMES Salmonella Mutagenicity Testing exhibits no evidence of mutagen presence.

Oral Toxicity: Rat LD50>100,000 mg/kg

Dermal Toxicity: Not absorbed topically

Inhalation Toxicity: None known

Skin Irritation: Rabbit; No irritation observed

Sensitizer: No human repeat insult patch test; Not a sensitizer

## **Section 12: Ecological Information**

### *Environmental Toxicity:*

Acute Fish 96 Hr LC50, Flathead minnow: 750 mg/L, NOEC/LOEC 500/1000

Acute Daphnia 48 Hr EC50: 743 mg/L, NOEC/LOEC 500/1000

Acute Purple sea urchin 40min. IC25 mg/L: >10, NOEC/LOEC 10/>10

## **Section 13: Disposal**

Incinerate liquid and contaminated solids in accordance with Federal, State, and local regulations and permits.

## **Section 14: Transport Information**

### *Domestic Data*

Dot Shipping Name: Not Regulated

Dot Hazard Class: Not Regulated

Hazardous Ingredients: None

### *Export Data*

Export Shipping Name: Not Regulated

Export Hazard Class: Not Regulated

Hazardous Ingredients: None

UN Number: None

## **Section 15: Regulatory Information**

### **SARA Section 313 Notification (40CFR 372)**

This Product Does Not Contain Toxic Chemicals Subject to the Reporting Requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

## **Section 16: Other Information**

HMIS Hazard Codes – Health/Flammability/Reactivity; 0,0,0

NFPA Hazard Codes - Health/Flammability/Reactivity; 0,0,0

**For Chemical Emergency  
Spill Leak Fire Exposure or Accident  
Call CHEMTREC Day or Night**

**DOMESTIC NORTH AMERICA 800-424-9300  
INTERNATIONAL, CALL 703-527-3887 (collect calls accepted)**