



# Walla Walla Environmental, Inc.

## MATERIAL SAFETY DATA SHEET

WALLA WALLA ENVIRONMENTAL, INC.

P.O. BOX 1298

WALLA WALLA, WA 99362

Emergency Telephone: 509-522-0490

**PRODUCT NAME:** W2E CAT-90 COAGULANT

Revision Date: January 3, 2006

### PRODUCT IDENTIFICATION

SUBSTANCE: Aluminum Chloride, solution

FORMULA : Proprietary

CHEMICAL FAMILY: Organic / Inorganic blend, coagulant and polymer

### INGREDIENTS

Al Cl<sub>3</sub>

Al (CH)<sub>5</sub> Cl

H<sub>2</sub>O

### CAS #

7446 - 70 - 0

12042 - 91 - 0

7732 - 18 - 5

All Ingredients Are Listed On The TSCA Chemical Substance Inventory

### PHYSICAL DATA

BOILING POINT:

110 C (230 F)

pH:

0.5 to 1.5

MELTING POINT:

- 34 C ( -30 F)

SOLUBILITY IN WATER:

Complete

SPECIFIC GRAVITY:

1.2800

VAPOR PRESSURE:

< 5mm Hg @ 20 C

% VOLATILE:

20% (water)

EVAPORATION RATE:

None Found

FORM :

Liquid

COLOR:

Colorless to dark yellow

ODOR:

Slightly acid

MOLECULAR WEIGHT:

133.35

### FIRE AND EXPLOSION HAZARDS

FLASH POINT:

Not Applicable

FLAMMABLE LIMITS IN AIR:

UFL : Not Applicable

LFL : Not Applicable

(% by Volume)

EXTINGUISHING MEDIA:

Will not burn; use materials appropriate for surrounding fire.

SPECIAL FIRE FIGHTING INSTRUCTIONS:

Cool exposed tanks with water

SPECIAL FIRE AND EXPLOSION HAZARDS: When subjected to high temperatures prevalent in a fire, aluminum chloride may decompose and release aluminum hydrate, hydrochloric acid and possibly hydrogen. Hydrochloric acid is corrosive and extremely irritating to respiratory tract; Self-contained breathing apparatus should be worn. Hydrogen is flammable and potentially explosive; appropriate precautions should be taken.

### REACTIVITY

STABILITY

: Stable at ambient temperatures.

- DECOMPOSITION : At elevated temperatures prevalent in a fire, product will decompose to aluminum hydrate, hydrochloric acid and possibly hydrogen.
- POLYMERIZATION : Will not occur.
- INCOMPATIBILITY : Rapidly corrodes most metals; may generate flammable, potentially explosive hydrogen gas.

### **HEALTH HAZARDS**

- EXPOSURE LIMITS : Not specifically regulated as toxic or hazardous by OSHA. The ACGIH TLV for mists and dusts of soluble aluminum salts is 2mg/m<sup>3</sup> as Al ( 8 hour time weighted average.)
- CARCINOGENICITY : None of the components of this material are listed as a carcinogen by LARC, NTP, OSHA or ACGIH.

### **TOXICOLOGY**

- INGESTION : When aluminum chloride is swallowed, it caused acute irritation and burns to the mucous membranes of the mouth, trachea, esophagus and stomach. There may be difficulty in swallowing and breathing due to acidic and astringent nature of material..
- EYE CONTACT : Eye contact results in severe irritation and painful burns of eyes and eyelids. If material is not removed by copious irrigation with water at room temperature, visual impairment or total loss of vision could result.
- SKIN CONTACT to : Skin contact may cause irritation or mild chemical burns. Skin may dry or crack due to astringent nature of material. Repeated skin contact may lead to development of dermatitis.
- INHALATION : Inhalation results in coughing, burning of nose and throat and a choking sensation. Reactions are usually limited to inflammation and occasional ulceration of mucosa.

### **FIRST AID**

- EYE : Immediately flush eyes for 15 minutes with plenty of water. Call a physician.
- SKIN : Flush skin with water. Remove contaminated clothing; wash before reuse.
- INHALATION : Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
- INGESTION : DO NOT INDUCE VOMITING. Give large quantities of water, then an antacid. Never give anything by mouth to an unconscious person. Call a physician.

### **PERSONAL PROTECTION**

Adequate general ventilation should be provided to keep vapor and mists below exposure limits.

Wear safety glasses with side shields. Wear a face shield if possibility of material splashing or spraying exists. Where there is possibility of skin contact, use the following as appropriate: gloves impervious to material, apron, boots, hood, pants and jacket. Wear a NIOSH/OSHA approved respirator with a dust/mist cartridge if there is potential of exposure to mists in excess of applicable limits.

### **SPILL/LEAK PROCEDURE**

Review safety precautions before proceeding with cleanup. Use appropriate personal protection equipment. Neutralize spill with lime (calcium hydroxide), limestone(calcium carbonate) or soda ash(sodium carbonate)

CAUTION : limestone and soda ash will evolve CO<sub>2</sub>; ventilation should be provided in enclosed areas. Dike area around spill to prevent spreading, and use absorbent material to pick up spill.

DISPOSAL : Under the Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user to determine whether a substance should be classified as a hazardous waste at the time of disposal. This is due to the fact that product use, transformation, synthesis, mixtures, etc. may change the nature of the product. Dispose of waste in accordance with applicable federal, state and local laws. CATIONIC POLYMERS ARE TOXIC TO FISH.

### **SHIPPING INFORMATION**

DOT  
PROPER SHIPPING NAME : Aluminum Chloride, solution.  
HAZARD CLASS : Corrosive material.  
UN/NA # : UN 2581.  
DOT LABELS : Corrosive  
DOT PLACARDS : Corrosive  
PACKAGING GROUP : III  
REPORTABLE QUANTITY : Not Applicable

STORAGE CONDITIONS : Keep containers closed.

### **TITLE III HAZARD CLASSIFICATIONS**

ACUTE : No  
CHRONIC : No  
FIRE : No  
REACTIVITY : No  
PRESSURE : No

EXTREMELY HAZARDOUS SUBSTANCE : No  
TOXIC CHEMICAL : No

NFPA/HMIS RATINGS : HEALTH : 2  
FLAMMABILITY : 0  
REACTIVITY : 0  
Personal protection rating to be supplied by user depending on use conditions.

### **ADDITIONAL INFORMATION AND REFERENCES**

This Material Safety Data Sheet refers only to the specific material designated herein, and does not relate to use in combination with any other material or in any process.

