

# Material Safety Data Sheet

## 1. PRODUCT AND COMPANY IDENTIFICATION

### EVERON (TM) SMT REPLENISHER II

Revision date: 09/24/2004

**Supplier** Rohm and Haas Electronic Materials LLC  
455 Forest Street  
Marlborough, MA 01752 United States of America

**For non-emergency information contact:** 508-481-7950

#### Emergency telephone number

Chemtrec 800-424-9300  
Rohm and Haas Emergency 215-592-3000

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Water	7732-18-5	80.0 - 90.0%
Ammonia	7664-41-7	<10.0%
Lead acetate	301-04-2	<0.01%
EDTA disodium salt	139-33-3	<0.1%

## 3. HAZARDS IDENTIFICATION

### Emergency Overview

#### Appearance

Form liquid

Colour clear

**Odour** ammoniacal

<b>Hazard Summary</b> Alkaline liquid and vapor. Causes skin, eye, and respiratory tract irritation. Onset of symptoms may be delayed.
--

#### Potential Health Effects

**Primary Routes of Entry:** Inhalation, ingestion, eye and skin contact.

**Eyes:** Will cause severe conjunctival irritation, corneal damage, and may result in loss of vision.

**Skin:** Material will cause severe irritation and may cause chemical burns.

**Ingestion:** Swallowing may have the following effects:  
severe irritation of mouth, throat and digestive tract

**Inhalation:** Inhalation may have the following effects:  
severe irritation to nose, throat and respiratory tract and possibly lung damage

**Target Organs:** Eye

Respiratory System

Skin

### **Carcinogenicity**

Not considered carcinogenic by NTP, IARC, and OSHA

---

## **4. FIRST AID MEASURES**

---

**Inhalation:** Remove from exposure. If there is difficulty in breathing, give oxygen. Seek medical attention if symptoms persist.

**Skin contact:** Wash skin with water. Continue washing for at least 15 minutes. Obtain medical attention if blistering occurs or redness persists.

**Eye contact:** Immediately flush the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

**Ingestion:** Wash out mouth with water. Have victim drink 1-3 glasses of water to dilute stomach contents. Immediate medical attention is required. Never administer anything by mouth if a victim is losing consciousness, is unconscious or is convulsing.

### **Notes to physician**

Treat symptomatically.

---

## **5. FIRE-FIGHTING MEASURES**

---

**Flash point** Nonflammable

**Suitable extinguishing media:** Not readily combustible.  
Select extinguishing agent appropriate to other materials involved.

**Specific hazards during fire fighting:** No specific measures necessary.

**Special protective equipment for fire-fighters:** Wear full protective clothing and self-contained breathing apparatus.

**Further information:** This product may give rise to hazardous vapors in a fire.

---

## **6. ACCIDENTAL RELEASE MEASURES**

---

### **Personal precautions**

Wear suitable protective clothing.

### **Environmental precautions**

Prevent the material from entering drains or water courses.

Do not discharge directly to a water source.

Advise Authorities if spillage has entered watercourse or sewer or has contaminated soil or vegetation.

### **Methods for cleaning up**

Cover with absorbent or contain. Collect and dispose.

---

## **7. HANDLING AND STORAGE**

---

### **Handling**

Use only in well-ventilated areas. Avoid breathing vapor. Avoid contact with eyes, skin and clothing. Keep container tightly closed.

**Further information on storage conditions:** No special precautions necessary.

### **Storage**

**Storage conditions:** Store in original container. Storage area should be: cool dry well ventilated out of direct

sunlight away from incompatible materials

---

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

---

### Exposure limit(s)

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value
Ammonia	Rohm and Haas	TWA	25 ppm
	Rohm and Haas	STEL	35 ppm
	ACGIH	TWA	17 mg/m3 25 ppm
	ACGIH	STEL	24 mg/m3 35 ppm
	OSHA_TRANS	PEL	35 mg/m3 50 ppm

Component	Regulation	Type of listing	Value
Lead acetate	ACGIH	TWA	0.05 mg/m3
	OSHASP	TWA	0.05 mg/m3
	OSHASP	OSHA_ACT	0.03 mg/m3
	OSHASP	TWA	0.05 mg/m3
	OSHASP	OSHA_ACT	0.03 mg/m3
	OSHASP	REF	
	Z1A	TWA	0.05 mg/m3
	OSHASP	REF	

**Eye protection:**Chemical goggles or safety glasses

**Hand protection:**Neoprene gloves. Other chemical resistant gloves may be recommended by your safety professional.

**Skin and body protection:**Normal work wear.

**Respiratory protection:**No personal respiratory protective equipment normally required. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

**Engineering measures:**Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (local exhaust), and control of process conditions.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

### Appearance

Form	liquid
Colour	clear
Odour	ammoniacal
pH	10.0 - 12.0
Boiling point/range	No data available
Flash point	Nonflammable
Vapour pressure	Similar to water
Relative vapour density	Heavier than air.
Water solubility	completely soluble
Relative density	0.98 - 1.02
Evaporation rate	Slower than ether
VOC's	0 g/l

NOTE: The physical data presented above are typical values and should not be construed as a specification.

---

## 10. STABILITY AND REACTIVITY

---

<b>Hazardous reactions</b>	Stable under normal conditions.
<b>Conditions to avoid</b>	contact with incompatible materials Exposure to sunlight. Extreme heat
<b>Materials to avoid</b>	Strong oxidizing agents Reducing agents acids
<b>Hazardous decomposition products</b>	phosphine, oxides of phosphorus, nitrogen oxides (NO <sub>x</sub> ), oxides of carbon, Ammonia,
<b>polymerization</b>	Will not occur.

---

## 11. TOXICOLOGICAL INFORMATION

---

*Toxicological information on this product or its components appear in this section when such data is available.*

Component: **Ammonia, anhydrous**

**Acute oral toxicity** LD50rat 350 mg/kg

Component: **Ammonia, anhydrous**

**Acute oral toxicity** LDLohuman 43 mg/kg

Component: **Lead di(acetate)**

**Acute oral toxicity** LD50rat 4,665 mg/kg

Component: **EDTA disodium salt**

**Acute oral toxicity** LD50rat 140 - 340 mg/kg

Component: **EDTA disodium salt**

**Acute dermal toxicity** LD50rabbit 5,000 mg/kg

Component: **Lead di(acetate)**

**Subchronic toxicity** IARC assessment: this product is possibly carcinogenic to humans (Group 2B).  
NTP assessment: this product is reasonably anticipated to be a human carcinogen.  
In laboratory animals, prolonged oral exposure produced carcinogenesis in the following tissues or systems:  
kidney  
thyroid  
testicles  
pituitary gland  
adrenal gland  
prostate gland  
mammary glands  
Prolonged or repeated exposure to low levels of lead may result in an accumulation in body tissues and exert adverse effects on blood, nervous system, heart, endocrine and immune systems, kidneys and reproductive system.

Component: **Lead di(acetate)**

**Toxicity to reproduction**

Experimental studies in animals have provided evidence of embryo/fetotoxicity and birth defects.

---

## 12. ECOLOGICAL INFORMATION

---

*Ecotoxicological information on this product or its components appear in this section when such data is available.*

**EDTA disodium salt**

**Ecotoxicity effects**

**Toxicity to fish** LC50Bluegill sunfish (*Lepomis macrochirus*)96 h  
>486 mg/l

---

## 13. DISPOSAL CONSIDERATIONS

---

---

**Environmental precautions:** Prevent the material from entering drains or water courses.

Do not discharge directly to a water source.

Advise Authorities if spillage has entered watercourse or sewer or has contaminated soil or vegetation.

## Disposal

Dispose in accordance with all local, state (provincial), and federal regulations. Under RCRA, it is the responsibility of the product's user to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because the product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

Do not remove label until container is thoroughly cleaned. Empty containers may contain hazardous residues. This material and its container must be disposed of in a safe way.

---

## 14. TRANSPORT INFORMATION

---

### DOT

Not regulated for transport

### IMO/IMDG

Not regulated (Not dangerous for transport)

*Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations*

---

## 15. REGULATORY INFORMATION

---

**SARA TITLE III:Section 311/312 Categorizations (40CFR370):** Immediate (acute) Health Hazard

### SARA TITLE III:Section 313 Information (40CFR372)

This product contains a chemical which is listed in Section 313 at or above de minimis concentrations.

SARA Title III Components:                      Ammonia    7664-41-7

### U.S. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D):

U.S. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

This product does not contain any substances subject to Section 12(b) export notification.

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

### California (Proposition 65)

This product contains a component or components known to the state of California to cause cancer and/or reproductive harm.

Components:                                      Lead di(acetate)    301-04-2  
    Thiourea    62-56-6

---

## 16. OTHER INFORMATION

---

### Hazard Rating

	Health	Fire	Reactivity
<b>NFPA</b>	3	0	1

### Legend

ACGIH                      American Conference of Governmental Industrial Hygienists

BAC                              Butyl acetate

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit

STEL Short Term Exposure Limit (STEL):

TLV Threshold Limit Value

TWA Time Weighted Average (TWA):

| Bar denotes a revision from prior MSDS.

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.

Print Date: 09/25/2004

Version:2.1

Layout 304233