

# Material Safety Data Sheet

## Rust Defense™

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Fluid Environmental Services, Inc.  
www.fluidenvironmental.com

### Section I

#### Manufacturer Information

Fluid Environmental Services, Inc.

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### Section II

#### Composition/Information on Ingredients

----- CHEMICAL NAME -----	CAS NUMBER	WT/WT % LESS THAN	ACGIH		OSHA		SKIN
			TLV-TWA	TLV-STEL	PEL-TWA	PEL-CEILING	
Triethanolamine	00000102-71-6	5.0 %	5 mg/m3	N.E.	5 mg/m3	N.E.	NO
Monoethanolamine	00000141-43-5	5.0 %	3 ppm	6 ppm	3 ppm	N.E.	NO
Dibasic acids mixture		5.0 %	N.E.	N.E.	N.E.	N.E.	NO
Boric acid	00010043-35-3	5.0 %	10 mg/m3	N.E.	5 mg/m3	N.E.	NO

### Section III

#### Hazardous Identification

\*\*\* EMERGENCY OVERVIEW \*\*\*: No Information.

**Effects of Overexposure - Eye Contact:** This material is not expected to be irritating to the eyes. However if direct eye contact should occur, flush with water for 15 minutes. If irritation should develop and persist then consult a physician.

**Effects of Overexposure - Skin Contact:** Not expected to be a skin irritant, however it may cause irritation or dermatitis in some individuals upon prolonged contact.

**Effects of Overexposure - Inhalation:** No hazard in normal industrial use.

**Effects of Overexposure - Ingestion:** No hazard in normal industrial use.

**Effects of Overexposure - Chronic Hazards:** No Information.

**Primary Routes of Entry:** Inhalation, Eye contact

### Section IV

#### First Aid Measures

**First Aid - Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention, if irritation persists.

**First Aid - Skin Contact:** Wash with soap and water. Get medical attention if irritation develops or persists.

**First Aid - Inhalation:** No Information.

**First Aid - Ingestion:** If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

### Section V

#### Fire Fighting Measures

Flash Point: N.A.

Lower Explosive Limit: 5.5 %

Upper Explosive Limit: 17.0 %

Autoignition Temperature: N/A

Extinguishing Media: CO<sub>2</sub>, DRY CHEMICAL, FOAM, WATER FOG

Unusual fire and explosion hazards: No Information.

Special firefighting procedures: No Information.

## Section VI

### Accidental Release Measures

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

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## Section VII

### Handling and Storage

**HANDLING:** Wash thoroughly after handling. Contains alkanolamines, do not mix with nitrite-containing materials due to the possible formation of nitrosamines which have been found to cause cancer in laboratory animals.

**STORAGE:** Keep from freezing.

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## Section VIII

### Exposure Controls and Personal Protection

**ENGINEERING CONTROLS:** Good general ventilation should be sufficient to control airborne levels.

**RESPIRATORY PROTECTION:** No Information.

**SKIN PROTECTION:** No Information.

**EYE PROTECTION:** Wear safety glasses with side shields (or goggles) and a face shield.

**OTHER PROTECTIVE EQUIPMENT:** No Information.

**HYGIENIC PRACTICES:** Wash hands before eating. Remove contaminated clothing and wash before reuse.

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## Section IX

### Physical and Chemical Properties

**BOILING RANGE :** 212 - 212 F

**ODOR :** Mild

**APPEARANCE :** Yellow Liquid

**SOLUBILITY IN H<sub>2</sub>O :** Soluble

**FREEZE POINT :** 32F

**VAPOR PRESSURE :** N/A

**PHYSICAL STATE :** Liquid

**COEFFICIENT OF WATER/OIL DISTRIBUTION :** 100% water

**VAPOR DENSITY :** Is heavier than air

**ODOR THRESHOLD :** N/A

**EVAPORATION RATE :** Is slower than Butyl Acetate

**SPECIFIC GRAVITY :** 1.0122

**pH @ 5.0 % :** 8.7

**VISCOSITY :** 32 SUS @ 100F

**BIODEGRADABLE :** Yes

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## Section X

### Stability and Reactivity

**CONDITIONS TO AVOID:** Avoid strong oxidizing and reducing agents, strong alkali and nitrites.

**INCOMPATIBILITY:** Strong oxidizing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Combustion can produce oxides of carbon and nitrogen, incompletely burned hydrocarbon products.

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**STABILITY:** This product is stable under normal storage conditions.

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## Section XI

### Toxicological Properties

No product or component toxicological information is available.

**TOXICOLOGICAL INFORMATION:** No Information.

**Section XII****Ecological Information**

ECOLOGICAL INFORMATION: No Information.

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**Section XIII****Disposal Considerations**

DISPOSAL METHOD: Dispose of product in accordance with local, county, state, and federal regulations.

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**Section XIV****Transportation Information**

DOT PROPER SHIPPING NAME:

DOT TECHNICAL NAME:

DOT HAZARD CLASS:

DOT UN/NA NUMBER:

HAZARD SUBCLASS:

PACKING GROUP:

RESP. GUIDE PAGE:

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**Section XV****Physical and Chemical Properties**

U.S. FEDERAL REGULATIONS: AS FOLLOWS -

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

CERCLA - SARA HAZARD CATEGORY:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

**IMMEDIATE HEALTH HAZARD**

**SARA SECTION 313:**

This product contains the following substances 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:

----- CHEMICAL NAME ----- CAS NUMBER WT/WT % IS LESS THAN

No SARA Section 313 components exist in this product.

**TOXIC SUBSTANCES CONTROL ACT:**

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

----- CHEMICAL NAME ----- CAS NUMBER

No information is available.

**INTERNATIONAL REGULATIONS: AS FOLLOWS -**

**CANADIAN WHMIS:** This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

**CANADIAN WHMIS CLASS:** No information available.

**HMIS RATINGS - HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0**

**PREVIOUS MSDS REVISION DATE: 01/09/08**

**VOLATILE ORGANIC COMPOUNDS (VOCS): 0.00 lbs/gal, 0 grams/ltr**

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**Section XVI****Other Information**

**LEGEND: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined**