

# Material Safety Data Sheet

ESA, Inc.  
22 Alpha Road  
Chelmsford, MA 01824-4171

Phone: 978-250-7000  
Fax: 978-250-7090  
Prepared: 12/13/02  
Updated:

**MSDS Date:** 12/13/02  
**Product Name:** HMBA Internal Standard 1.0 mg/ml  
**Product Number:** 70-5676  
**Manufacturer:** ESA, Inc.

## I. Product and Company Description

ESA, Inc.  
22 Alpha Road  
Chelmsford, MA 01824-4171

**For Product Information:**  
978-250-7000

**Emergency Phone Number:**  
800-535-5053 (INFOTRAC)  
Outside of the United States call collect 1-352-323-3500

**Chemical Name or Synonym:**  
N/A

## II. Chemical Composition

Component	CAS#	%Composition
4-Hydroxy-3-Methoxybenzylaminehydrochloride	7149-10-2	<1
Acetic Acid	64-19-7	1.2
Water	7732-18-5	98

## III. Hazards Identification

### Potential Health Effects:

**Acute Eye:**  
May cause irritation.

**Acute Skin:**  
May cause irritation with prolonged or repeated skin contact.

**Acute Inhalation:**  
May cause respiratory tract irritation.

**Acute Ingestion:**  
May cause gastrointestinal irritation and severe injury if swallowed.

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## IV. First Aid Measures

### First Aid Measures for Accidental:

**Eye Exposure:**

Immediately flush eyes with copious amounts of water. If irritation develops, SEEK MEDICAL ATTENTION.

**Skin Exposure:**

Wash affected areas with soap and water. If irritation develops, SEEK MEDICAL ATTENTION. Remove and launder contaminated clothing before reuse.

**Inhalation:**

Move to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen. SEEK MEDICAL ATTENTION.

**Ingestion:**

Never give fluids or induce vomiting if the victim is unconscious or having convulsions. SEEK MEDICAL ATTENTION.

## V. Fire Fighting Measures

### Fire Hazard Data:

**Flash Point:** ND

**Autoignition:** ND

<b>Flammability Limits (vol/vol%):</b>	<b>Lower:</b>	<b>Upper:</b>
	ND	ND

**Extinguishing Media:**

Dry chemical, alcohol foam, CO2, water spray.

**Special Fire Fighting Procedures:**

Individuals should perform only those fire-fighting procedures for which they have been trained. Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Unusual Fire and Explosion Hazards:**

Contact with strong oxidizers may cause fire. Reacts with most metals to produce hydrogen gas, which can form an explosive mixture with air.

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## VI. Accidental Release Measures

### Cleanup and Disposal of Spill:

Evacuate the area of all unnecessary personnel. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if this can be done without risk. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations.

## VII. Handling and Storage

### Handling/Storage:

Store away from ignition sources and oxidizers. Electrically ground all equipment when handling this product. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed and in a cool, dry place.

## VIII. Exposure Controls/Personal Protection

### Exposure Guidelines:

Component	ACGIH	OSHA-PELs
4-Hydroxy-3-Methoxybenzylaminehydrochloride	ND	ND
Acetic Acid	10 ppm TWA 15 ppm STEL	10 ppm TWA
Water	N/A	N/A

### Engineering Controls:

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS.

### Respiratory Protection:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149 if workplace exposure limit(s) is exceeded. Always use a NIOSH/MSA approved respirator when necessary.

### Eye/Face Protection:

Wear safety glasses (ANSI standard Z87.1) when handling this product.

### Skin Protection:

Wear chemical resistant gloves (such as latex or neoprene) and protective clothing to minimize skin contact.

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## IX. Physical and Chemical Properties

**Physical Appearance:** Clear Liquid

**Odor:** None

**pH:** 2.7

**Density:** 1.0 g/ml

**Specific Gravity:** ND

**Water Solubility:** Soluble

**Melting Point:** ND

**Freezing Point:** ND

**Boiling Point:** ND

**Vapor Pressure:** ND

**Vapor Density:** ND

**Percent Volatiles by Volume:** 1.2%

**Viscosity:** ND

## X. Stability and Reactivity

**Chemical Stability:**

Stable

**Conditions to Avoid:**

Heat, flame, freezing, incompatibles and ignition sources.

**Materials/Chemicals to be Avoided:**

Strong acids, metals, carbonates, hydroxides, oxides, phosphates, ethylene glycol, phosphorous trichloride, zinc, magnesium, copper, and water, oxidizing agents.

**Hazardous Decomposition Products:**

Carbon Monoxide, Carbon Dioxide, nitrogen oxides, and hydrogen chloride gas.

**Hazardous Polymerization:**

Will not occur.

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## XI. Toxicological Information

### For Acetic Acid

#### Acute Oral Toxicity:

LD 50 Rat: 3310 mg/kg

#### Acute Dermal Toxicity:

Rabbit: LD50: 1.06 g/kg

#### Acute Inhalation Toxicity:

LC50 Mouse: 5620 ppm/1H

## XII. Ecological Information

### For Acetic Acid

#### Environmental Fate:

When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals. When released into air, this material is expected to have a half life between 10 and 30 days. When released into water, this material is expected to readily biodegrade. When released into the water, this material expected to have a half-life between 1 and 10 days. Standard dilution BOD5/TOD=58%. When released into the soil, this material is expected to readily biodegrade. This material is not expected to significantly bioaccumulate. This material has an estimated bioconcentration factor (BCF) of less than 100.

#### Environmental Toxicity:

This material is expected to be slightly toxic to aquatic life. The LC50/96-hour values for fish are between 10 and 100 mg/l.

EC50 (wheat fumigation) = 23.3 mg/m<sup>3</sup>/2-hr, effect: leaf injury

LC50 (shrimp) = 100-300 mg/l/48-hr

LC50 (fathead minnow) = 88 mg/l/96-hr

## XIII. Disposal Considerations

#### Waste Disposal Method:

Dispose of in accordance with federal, state and local regulations.

## XIV. Transportation Information

#### US Department of Transportation Shipping Name:

US Department of Transportation	Proper Shipping Name	Not Regulated
	Hazard Class	Not Regulated
	ID Number	Not Regulated
	Packaging Group	Not Regulated

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## XV. Regulatory Information

### Federal Regulations:

#### **SARA Title III Hazard Classes:**

Fire Hazard:	Yes
Reactive Hazard:	No
Release of Pressure:	No
Acute Health Hazard:	Yes
Chronic Health Hazard:	Yes

#### **TSCA:**

Acetic acid and water are on the TSCA inventory.

### Other Regulations:

#### **State:**

None

## XVI. Other Information

### **National Fire Protection Hazard Ratings - NFPA:**

Health Hazard:	1
Flammability:	1
Reactivity:	0

### **Key Legend Information:**

N/A - Not Applicable

ND - Not Determined

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

TLV - Threshold Limit Value

PEL - Permissible Exposure Limit

TWA - Time Weighted Average

STEL - Short Term Exposure Limit

NTP - National Toxicology Program

IARC - International Agency for Research on Cancer

**The information contained herein is based on the data available to us and is believed to be correct. However ESA, Inc. makes no warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.**