

# 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:** Plasma Metanephrine Eluting Solution  
**Product Number:** 70-5675  
**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
Ammonium Hydroxide	1336-21-6	<1
Methanol	67-56-1	75
Water	7732-18-5	25

## III. Hazards Identification

### Potential Health Effects:

**Acute Eye:**  
May cause irritation and possible eye damage.

**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:** <71°F

**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:**

Emits toxic fumes, which may include oxides of nitrogen and sulfur, and hydrogen chloride under fire conditions.

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## VI. Accidental Release Measures

### Cleanup and Disposal of Spill:

Evacuate the area of all unnecessary personnel. 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. Store away from incompatibles. 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
Ammonium Hydroxide	ND	ND
Methanol	200 ppm TWA 250 ppm STEL	200 ppm TWA 250 ppm STEL
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

<b>Physical Appearance:</b>	Clear Liquid
<b>Odor:</b>	Mild Ammonia Odor
<b>pH:</b>	~10
<b>Density:</b>	0.84
<b>Specific Gravity:</b>	ND
<b>Water Solubility:</b>	Soluble
<b>Melting Point:</b>	ND
<b>Freezing Point:</b>	ND
<b>Boiling Point:</b>	68°C
<b>Vapor Pressure:</b>	ND
<b>Vapor Density:</b>	ND
<b>Percent Volatiles by Volume:</b>	75%
<b>Viscosity:</b>	ND

## X. Stability and Reactivity

### Chemical Stability:

Stable

### Conditions to Avoid:

Heat, flame, freezing, incompatibles, ignition sources, and high temperatures.

### Materials/Chemicals to be Avoided:

Strong oxidizing agents, acrolein, acrylic acid, chlorosulfonic acid, dimethyl sulfate, fluorine, gold + aqua regia, hydrochloric acid, hydrofluoric acid, iodine, nitric acid, oleum, propiolactone, propylene oxide, silver nitrate, silver oxide, ethyl alcohol, nitromethane, silver permanganate, sulfuric acid, halogens, strong acids, metals, carbonates, hydroxides, oxides, phosphates, ethylene glycol, phosphorous trichloride, zinc, magnesium, copper.

### Hazardous Decomposition Products:

Carbon Monoxide, Carbon Dioxide, nitric oxide, ammonia, and formaldehyde.

### Hazardous Polymerization:

Will not occur.

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## XI. Toxicological Information

### For Ammonium Hydroxide

#### Acute Oral Toxicity:

LD 50 Rat: 350 mg/kg

### For Methanol

#### Acute Oral Toxicity:

LD 50 Rat: 5628 mg/kg

LDLo Human: 143 mg/kg

#### Acute Dermal Toxicity:

Rabbit: LD50: 15800 mg/kg

#### Acute Inhalation Toxicity:

LC50 Rat: 64000 ppm/4H

#### Chronic:

Tests on laboratory animals indicate material may produce adverse mutagenic and reproductive effects.

## XII. Ecological Information

### Ecotoxicological Information:

Degradation: Not Determined

Accumulation: Not Determined

Aquatic-Toxicity: For Ammonium Hydroxide: 24hr LC 50: .008 mg/L Rainbow trout  
96hr LC 50: 8.2 mg/L Fathead minnow  
96hr LC 50: 0.024-0.93 mg/L Bluegill sunfish  
48hr EC 50: 0.66mg/L Daphnia

### Chemical Fate Information:

Not Determined

## 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	Methanol
	Hazard Class	3
	ID Number	UN1230
	Packaging Group	II

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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:**

All components of this product are on the TSCA inventory.

### Other Regulations:

#### **State:**

Ammonium Hydroxide can be found on the following state right to know lists: CA, NJ, PA, and MA.

## XVI. Other Information

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

Health Hazard:	1
Flammability:	3
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.**