## **Material Safety Data Sheet**

Version 4.0 Revision Date 08/09/2010 Print Date 03/21/2011

roduct name	N-Ethyl-N-(2-hydroxyethyl)-p-phenylenediamine sulfate salt monohydrate
Product Number	: 04130
Brand	: Fluka
Company	: Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 USA
elephone	: +18003255832
-ax <sup>'</sup>	: +18003255052
Emergency Phone #	: (314) 776-6555

## 2. HAZARDS IDENTIFICATION

## Emergency Overview

**OSHA Hazards** No known OSHA hazards

HMIS Classification	
Health hazard:	0
Flammability:	0
Physical hazards:	0
NFPA Rating	
Health hazard:	0
Fire:	0
Reactivity Hazard:	0
Potential Health Effects	
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	May be harmful if swallowed.

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Formula Molecular Weight	: C <sub>10</sub> H <sub>16</sub> N <sub>2</sub> O · H <sub>2</sub> SO <sub>4</sub> · : 296.34 g/mol	H <sub>2</sub> O
CAS-No.	EC-No.	Index-No.

CAS-No.	EC-No.	Index-No.	Concentration			
(p-Ammoniophenyl)ethyl(2-hydroxyethyl)ammonium sulphate						
4327-84-8	224-361-0	-	-			

## **4. FIRST AID MEASURES**

## If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

## In case of skin contact

Wash off with soap and plenty of water.

## In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

## 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Avoid dust formation. Avoid breathing vapors, mist or gas.

#### **Environmental precautions**

Do not let product enter drains.

#### Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

#### Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

#### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

hygroscopic Light sensitive. Store under inert gas. Air sensitive. Keep in a dry place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

## Personal protective equipment

#### **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

General industrial hygiene practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance

Form

powder

#### Colour light red Safety data pН no data available 177 - 179 °C (351 - 354 °F) Melting point Boiling point no data available Flash point no data available Ignition temperature no data available Lower explosion limit no data available Upper explosion limit no data available Water solubility no data available

## **10. STABILITY AND REACTIVITY**

## **Chemical stability**

Stable under recommended storage conditions.

## Conditions to avoid

no data available

Materials to avoid Strong oxidizing agents

## Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Sulphur oxides

## **11. TOXICOLOGICAL INFORMATION**

Acute toxicity no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitization no data available

#### Germ cell mutagenicity no data available

## Carcinogenicity

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

## **Reproductive toxicity**

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System) no data available

## Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

# Aspiration hazard no data available

## Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

#### **Additional Information**

## **12. ECOLOGICAL INFORMATION**

#### Toxicity

no data available

Persistence and degradability no data available

**Bioaccumulative potential** no data available

Mobility in soil no data available

**PBT and vPvB assessment** no data available

#### Other adverse effects

no data available

## **13. DISPOSAL CONSIDERATIONS**

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### Contaminated packaging

Dispose of as unused product.

## **14. TRANSPORT INFORMATION**

#### DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

## ΙΑΤΑ

Not dangerous goods

## **15. REGULATORY INFORMATION**

## OSHA Hazards

No known OSHA hazards

## **DSL Status**

All components of this product are on the Canadian DSL list.

## SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

## SARA 311/312 Hazards

No SARA Hazards

## Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know Components

(p-Ammoniophenyl)ethyl(2-hydroxyethyl)ammonium sulphate	CAS-No. 4327-84-8	Revision Date
New Jersey Right To Know Components		Devision Data
(p-Ammoniophenyl)ethyl(2-hydroxyethyl)ammonium sulphate	CAS-No. 4327-84-8	Revision Date

0 4 0 M

D. S. D.

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## **16. OTHER INFORMATION**

## **Further information**

Copyright 2010 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.