# **SAFETY DATA SHEET**

## 1. PRODUCT

#### 1.1 Product identifiers

Name: 4-Aminotoluene-3-sulfonic acid

CAS-No.: 88-44-8

# 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, Manufacture of substances

#### 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

# GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin corrosion (Category 1A), H314

Eye irritation (Category 2A), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 2.2 GHS Label elements, including precautionary statements

| Pictogram                     |  |
|-------------------------------|--|
| Signal word                   | Danger   |
| Hazard statement(s)           | H314 Causes severe skin burns and eye damage.  |
| Precautionary<br>statement(s) | P260 Do not breathe dust or mist. P264 Wash skin thoroughly after handling. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/ physician. P321 Specific treatment (see supplemental first aid instructions on this label). P337 + P313 If eye irritation persists: Get medical advice/ attention. P363 Wash contaminated clothing before reuse. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant. |

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No data available

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

# 3.1 Substances

Synonyms: 2-Amino-5-methylbenzenesulfonic acid

4-Methylaniline-2-sulfonic acid

Formula:  $C_7H_9NO_3S$  CAS-No.: 88-44-8 EC-No.: 201-831-3

# **Hazardous components**

| Component                       | Classification                     | Concentration |  |  |
|---------------------------------|------------------------------------|---------------|--|--|
| 4-Aminotoluene-3-sulphonic acid |                                    |               |  |  |
|                                 | Skin Corr. 1A; Eye Irrit. 2A; H314 | -             |  |  |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

# 4.1 Description of first aid measures

## General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

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

## In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

# In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

# 4.2 Indication of any immediate medical attention and special treatment needed

no data available

## **5. FIREFIGHTING MEASURES**

# 5.1 Extinguishing media

# Suitable extinguishing media

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

# 5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NOx), Sulphur oxides

## 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

# 5.4 Further information

no data available

## 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

#### 6.2 Environmental precautions

Do not let product enter drains.

# 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for

disposal.

# 6.4 Reference to other sections

For disposal see section 13.

# 7. HANDLING AND STORAGE

# 7.1 Precautions for safe handling

Avoid formation of dust and aerosols.

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

For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

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

# 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1 Control parameters

# Components with workplace control parameters

Contains no substances with occupational exposure limit values.

# 8.2 Exposure controls

# Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

# Personal protective equipment

| Eye/face protection                | Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).  |
|------------------------------------|---|
| Skin<br>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.  |
| Body<br>Protection                 | Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.   |
| Respiratory protection             | Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). |
| Control of environmen tal exposure | Do not let product enter drains.  |

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

| Appearance                              | Form: crystalline<br>Colour: beige |
|---|------------------------------------|
| Odour                                   | no data available                  |
| Odour Threshold                         | no data available                  |
| pH                                      | 3.8 at 6.0 g/l at 25 °C (77 °F)    |
| Melting point/freezing point            | > 300 °C (> 572 °F)                |
| Initial boiling point and boiling range | > 350 °C (> 662 °F)                |
| Flash point                             | no data available                  |

| Evaporation rate                             | no data available               |
|--|---------------------------------|
| Flammability (solid, gas)                    | no data available               |
| Upper/lower flammability or explosive limits | no data available               |
| Vapour pressure                              | no data available               |
| Vapour density                               | no data available               |
| Relative density                             | 1.49 g/cm3 at 25 °C (77 °F)     |
| Water solubility                             | 6 g/l at 20 °C (68 °F)          |
| Partition coefficient: n-octanol/water       | log Pow: -0.67 at 25 °C (77 °F) |
| Auto-ignition temperature                    | no data available               |
| Decomposition temperature                    | no data available               |
| Viscosity                                    | no data available               |
| Explosive properties                         | no data available               |
| Oxidizing properties                         | no data available               |

# 9.2 Other safety information

no data available

# 10. STABILITY AND REACTIVITY

# 10.1 Reactivity

no data available

# 10.2 Chemical stability

Stable under recommended storage conditions.

# 10.3 Possibility of hazardous reactions

no data available

# 10.4 Conditions to avoid

no data available

# 10.5 Incompatible materials

Strong oxidizing agents

# 10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

# 11. TOXICOLOGICAL INFORMATION

# 11.1 Information on toxicological effects

# Acute toxicity LD50 Oral - rat - 11,700 mg/kg

Inhalation: no data available Dermal: no data available no data available

# Skin corrosion/irritation

# Serious eye damage/eye irritation

Eyes - rabbit

# Respiratory or skin sensitisation

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

no data available

## Specific target organ toxicity -single exposure

no data available

#### Specific target organ toxicity -repeated exposure

no data available

#### **Aspiration hazard**

no data available

# **Additional Information**

Repeated dose toxicity - rat - Gavage

Blood:Changes in cell count (unspecified). blood lipid changes

RTECS: XT6320000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated., Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache

Stomach - Irregularities - Based on Human Evidence Stomach - Irregularities - Based on Human Evidence

#### 12. ECOLOGICAL INFORMATION

## 12.1 Toxicity

| Toxicity to fish                                    | LC50 - Oryzias latipes - > 10 mg/l - 96 h                               |
|---|---|
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - > 10 mg/l - 48 h                    |
| Toxicity to algae                                   | EC50 - Scenedesmus capricornutum (fresh water algae) - > 10 mg/l - 72 h |
| Toxicity to bacteria                                | No data available   |

## 12.2 Persistence and degradability

| Biodegradability | (Directive 67/548/EEC Annex V, C.4.C.) Remarks: According to the results of tests of biodegradability this product is not |  |
|------------------|---|--|
|                  | readily biodegradable.  |  |

#### 12.3 Bioaccumulative potential

no data available

#### 12.4 Mobility in soil

no data available

# 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

no data available

## 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

## **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### Contaminated packaging

# 14. TRANSPORT INFORMATION

# DOT (US)

UN number: 2585 Class: 8 Packing group: III Proper shipping name: Aryl sulfonic acids, solid

Marine pollutant: No

Poison Inhalation Hazard: No

## **IMDG**

UN number: 2585 Class: 8 Packing group: III EMS-No: F-A, S-B Proper shipping name: ARYLSULPHONIC ACIDS, SOLID

Marine pollutant: No

#### **IATA**

UN number: 2585 Class: 8 Packing group: III
Proper shipping name: Arylsulphonic acids, solid

#### 15. REGULATORY INFORMATION

## **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

Acute Health Hazard, Chronic Health Hazard

# Massachusetts Right To Know Components

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

# Pennsylvania Right To Know Components

| Component                       | CAS-No. | Revision Date |
|---------------------------------|---------|---------------|
| 4-Aminotoluene-3-sulphonic acid | 88-44-8 |               |

#### **New Jersey Right To Know Components**

| Component                       | CAS-No. | Revision Date |
|---------------------------------|---------|---------------|
| 4-Aminotoluene-3-sulphonic acid | 88-44-8 |               |

# 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

# Full text of H-Statements referred to under sections 2 and 3.

Eye Irrit. Eye irritation

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

Skin Corr. Skin corrosion

# **HMIS Rating**

Health hazard: 3

Chronic Health Hazard: \*

Flammability: 0

Physical Hazard 0

# **NFPA Rating**

Health hazard: 3

Fire Hazard: 0

Reactivity Hazard: 0