

## SAFETY DATA SHEET

Creation Date 05-Nov-2010

Revision Date 18-Jan-2018

Revision Number 4

### 1. Identification

**Product Name** 2-Aminothiophenol

**Cat No. :** AC153900000; AC153900050; AC153901000; AC153905000

**CAS-No** 137-07-5  
**Synonyms** 2-Aminobenzenethiol; 2-Mercaptoaniline

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.  
**Details of the supplier of the safety data sheet**

**Company**

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

**Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|  |              |
|--|--------------|
| Flammable liquids                                | Category 4   |
| Acute oral toxicity                              | Category 4   |
| Skin Corrosion/Irritation                        | Category 1 B |
| Serious Eye Damage/Eye Irritation                | Category 1   |
| Specific target organ toxicity (single exposure) | Category 3   |
| Target Organs - Respiratory system.              |              |

**Label Elements**

**Signal Word**

Danger

**Hazard Statements**

Combustible liquid  
Harmful if swallowed  
Causes severe skin burns and eye damage

May cause respiratory irritation



### Precautionary Statements

#### Prevention

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Use only outdoors or in a well-ventilated area  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Keep cool

#### Response

Immediately call a POISON CENTER or doctor/physician

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

#### Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse

#### Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

#### Ingestion

Rinse mouth  
 Do NOT induce vomiting

#### Fire

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

#### Storage

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

#### Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects

## 3. Composition/Information on Ingredients

| Component              | CAS-No   | Weight % |
|------------------------|----------|----------|
| Benzenethiol, 2-amino- | 137-07-5 | >95      |

## 4. First-aid measures

### General Advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

### Eye Contact

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing.

### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Call a physician immediately.

|  |   |
|--|---|
| <b>Inhalation</b>                          | Remove from exposure, lie down. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician immediately.   |
| <b>Ingestion</b>                           | Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Clean mouth with water.  |
| <b>Most important symptoms and effects</b> | Difficulty in breathing. Causes burns by all exposure routes. . Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation |
| <b>Notes to Physician</b>                  | Treat symptomatically   |

## 5. Fire-fighting measures

|   |   |
|---|---|
| <b>Suitable Extinguishing Media</b>     | CO <sub>2</sub> , dry chemical, dry sand, alcohol-resistant foam. Water mist may be used to cool closed containers. |
| <b>Unsuitable Extinguishing Media</b>   | Do not use a solid water stream as it may scatter and spread fire   |
| <b>Flash Point</b>                      | 79 °C / 174.2 °F  |
| <b>Method -</b>                         | No information available  |
| <b>Autoignition Temperature</b>         | No information available  |
| <b>Explosion Limits</b>                 |   |
| <b>Upper</b>                            | No data available   |
| <b>Lower</b>                            | No data available   |
| <b>Sensitivity to Mechanical Impact</b> | No information available  |
| <b>Sensitivity to Static Discharge</b>  | No information available  |

### Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Combustible material. Containers may explode when heated. Do not allow run-off from fire-fighting to enter drains or water courses.

### Hazardous Combustion Products

Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Sulfur oxides. Thermal decomposition can lead to release of irritating gases and vapors.

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

### NFPA

|               |                     |                    |                         |
|---------------|---------------------|--------------------|-------------------------|
| <b>Health</b> | <b>Flammability</b> | <b>Instability</b> | <b>Physical hazards</b> |
| 3             | 2                   | 1                  | N/A                     |

## 6. Accidental release measures

|                                  |   |
|----------------------------------|---|
| <b>Personal Precautions</b>      | Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.  |
| <b>Environmental Precautions</b> | Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional Ecological Information. Avoid release to the environment. Collect spillage. |

**Methods for Containment and Clean Up** Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Remove all sources of ignition.

## 7. Handling and storage

**Handling** Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from open flames, hot surfaces and sources of ignition.

**Storage** Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Store under an inert atmosphere.

## 8. Exposure controls / personal protection

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal Protective Equipment

**Eye/face Protection** Tight sealing safety goggles. Face protection shield.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

|   |                              |
|---|------------------------------|
| <b>Physical State</b>                         | Liquid                       |
| <b>Appearance</b>                             | Amber                        |
| <b>Odor</b>                                   | pungent                      |
| <b>Odor Threshold</b>                         | No information available     |
| <b>pH</b>                                     | No information available     |
| <b>Melting Point/Range</b>                    | 20 °C / 68 °F                |
| <b>Boiling Point/Range</b>                    | 234 °C / 453.2 °F @ 760 mmHg |
| <b>Flash Point</b>                            | 79 °C / 174.2 °F             |
| <b>Evaporation Rate</b>                       | No information available     |
| <b>Flammability (solid,gas)</b>               | Not applicable               |
| <b>Flammability or explosive limits</b>       |                              |
| <b>Upper</b>                                  | No data available            |
| <b>Lower</b>                                  | No data available            |
| <b>Vapor Pressure</b>                         | No information available     |
| <b>Vapor Density</b>                          | No information available     |
| <b>Specific Gravity</b>                       | 1.160                        |
| <b>Solubility</b>                             | Insoluble in water           |
| <b>Partition coefficient; n-octanol/water</b> | No data available            |
| <b>Autoignition Temperature</b>               | No information available     |
| <b>Decomposition Temperature</b>              | No information available     |
| <b>Viscosity</b>                              | No information available     |
| <b>Molecular Formula</b>                      | C6 H7 N S                    |
| <b>Molecular Weight</b>                       | 125.19                       |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactive Hazard</b>                  | None known, based on information available  |
| <b>Stability</b>                        | Air sensitive.  |
| <b>Conditions to Avoid</b>              | Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition. Exposure to air.  |
| <b>Incompatible Materials</b>           | Acids, Strong oxidizing agents, Acid anhydrides, Acid chlorides, Chloroformates   |
| <b>Hazardous Decomposition Products</b> | Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Sulfur oxides, Thermal decomposition can lead to release of irritating gases and vapors |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur.  |
| <b>Hazardous Reactions</b>              | None under normal processing.   |

## 11. Toxicological information

### Acute Toxicity

#### Product Information

#### Component Information

**Toxicologically Synergistic** No information available

#### Products

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|                        |  |
|------------------------|--|
| <b>Irritation</b>      | Causes severe burns by all exposure routes   |
| <b>Sensitization</b>   | No information available   |
| <b>Carcinogenicity</b> | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component              | CAS-No   | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|------------------------|----------|------------|------------|------------|------------|------------|
| Benzenethiol, 2-amino- | 137-07-5 | Not listed | Not listed | Not listed | Not listed | Not listed |

|   |   |
|---|---|
| <b>Mutagenic Effects</b>                          | No information available  |
| <b>Reproductive Effects</b>                       | No information available.   |
| <b>Developmental Effects</b>                      | No information available.   |
| <b>Teratogenicity</b>                             | No information available.   |
| <b>STOT - single exposure</b>                     | Respiratory system  |
| <b>STOT - repeated exposure</b>                   | None known  |
| <b>Aspiration hazard</b>                          | No information available  |
| <b>Symptoms / effects, both acute and delayed</b> | Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation |
| <b>Endocrine Disruptor Information</b>            | No information available  |
| <b>Other Adverse Effects</b>                      | The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.  |

## 12. Ecological information

### Ecotoxicity

The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

| Component              | Freshwater Algae | Freshwater Fish                               | Microtox   | Water Flea |
|------------------------|------------------|---|------------|------------|
| Benzenethiol, 2-amino- | Not listed       | LC50: = 0.57 mg/L, 96h<br>(Brachydanio rerio) | Not listed | Not listed |

**Persistence and Degradability** Insoluble in water May persist based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Is not likely mobile in the environment due its low water solubility.

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

### DOT

UN-No UN3267  
 Proper Shipping Name Corrosive liquid, basic, organic, n.o.s.  
 Technical Name Benzenethiol, 2-amino-  
 Hazard Class 8  
 Packing Group II

### TDG

UN-No UN3267  
 Proper Shipping Name Corrosive liquid, basic, organic, n.o.s.  
 Hazard Class 8  
 Packing Group II

### IATA

UN-No UN3267  
 Proper Shipping Name Corrosive liquid, basic, organic, n.o.s.  
 Hazard Class 8  
 Packing Group II

### IMDG/IMO

UN-No UN3267  
 Proper Shipping Name Corrosive liquid, basic, organic, n.o.s.  
 Hazard Class 8  
 Packing Group II

## 15. Regulatory information

### United States of America Inventory

| Component              | CAS-No   | TSCA | TSCA Inventory notification -<br>Active/Inactive | TSCA - EPA Regulatory<br>Flags |
|------------------------|----------|------|--|--------------------------------|
| Benzenethiol, 2-amino- | 137-07-5 | X    | ACTIVE   | -                              |

### Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

**TSCA 12(b)** - Notices of Export Not applicable

**International Inventories**

Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

| Component              | CAS-No   | DSL | NDSL | EINECS    | PICCS | ENCS | AICS | IECSC | KECL       |
|------------------------|----------|-----|------|-----------|-------|------|------|-------|------------|
| Benzenethiol, 2-amino- | 137-07-5 | X   | -    | 205-277-3 | X     | X    | X    | X     | 2011-1-624 |

**U.S. Federal Regulations**

|   |   |
|---|---|
| <b>SARA 313</b>   | Not applicable  |
| <b>SARA 311/312 Hazard Categories</b>                       | See section 2 for more information                          |
| <b>CWA (Clean Water Act)</b>                                | Not applicable  |
| <b>Clean Air Act</b>  | Not applicable  |
| <b>OSHA - Occupational Safety and Health Administration</b> | Not applicable  |
| <b>CERCLA</b>   | Not applicable  |
| <b>California Proposition 65</b>                            | This product does not contain any Proposition 65 chemicals. |
| <b>U.S. State Right-to-Know Regulations</b>                 | Not applicable  |
| <b>U.S. Department of Transportation</b>                    |   |
| Reportable Quantity (RQ):                                   | N   |
| DOT Marine Pollutant  | N   |
| DOT Severe Marine Pollutant                                 | N   |
| <b>U.S. Department of Homeland Security</b>                 | This product does not contain any DHS chemicals.            |

**Other International Regulations**

|                       |                        |
|-----------------------|------------------------|
| <b>Mexico - Grade</b> | Moderate risk, Grade 2 |
|-----------------------|------------------------|

## 16. Other information

|                         |   |
|-------------------------|---|
| <b>Prepared By</b>      | Regulatory Affairs<br>Thermo Fisher Scientific<br>Email: EMSDS.RA@thermofisher.com  |
| <b>Creation Date</b>    | 05-Nov-2010   |
| <b>Revision Date</b>    | 18-Jan-2018   |
| <b>Print Date</b>       | 18-Jan-2018   |
| <b>Revision Summary</b> | This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). |

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**