

SAFETY DATA SHEET

Revision Date 21-Aug-2023 **Revision Number** 2

1. Identification

Product Name 4-Methylthiophene-2-boronic acid

Cat No.: AC35960DA; AC35960CB; AC35960ZZ

CAS No 162607-15-0

Synonyms 4-Methyl-2-thienylboric acid

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 Company One Reagent Lane Fair Lawn, NJ 07410

Tel: (201) 796-7100

Thermo Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410

Emergency Telephone Number

For information **US** call: 001-800-227-6701 / 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)

Skin Corrosion/Irritation Category 2 Serious Eye Damage/Eye Irritation Category 2 Specific target organ toxicity (single exposure) Category 3

Target Organs - Respiratory system.

Label Elements

Signal Word

Warning

Hazard Statements

Causes skin irritation Causes serious eye irritation

May cause respiratory irritation



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell

Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Storage

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

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

| Component | CAS No | Weight % | |
|----------------------------------|-------------|----------|--|
| 4-Methylthiophene-2-boronic acid | 162607-15-0 | 96 | |

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes.

Inhalation Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial

respiration. Get medical attention.

Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink

plenty of water. Clean mouth with water. Get medical attention. If possible drink milk

afterwards.

Most important symptoms and

effects

Notes to Physician

No information available.

Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO 2). Dry chemical. Chemical foam.

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

Autoignition Temperature

Explosion Limits

Not applicable

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO2). Sulfur oxides. Oxides of boron.

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.

NFPA

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 2 | 0 | 0 | N/A |

6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required.

Environmental Precautions See Section 12 for additional Ecological Information.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. **Up**

| 7. Handling | and storage |
|-------------|-------------|
| | |

Handling Avoid contact with skin and eyes. Do not breathe dust.

Storage. Keep in a dry place. Keep container tightly closed. Keep refrigerated. Incompatible

Materials. Acids. Strong bases.

8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limitsestablished 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 Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

4-Methylthiophene-2-boronic acid

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

No protective equipment is needed under normal use conditions. **Respiratory Protection**

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

9. Physical and chemical properties

Physical State Powder Solid

Appearance Beige

Odor No information available **Odor Threshold** No information available No information available Ha

125 - 126 °C / 257 - 258.8 °F Melting Point/Range

Boiling Point/Range No information available **Flash Point** No information available

Not applicable **Evaporation Rate**

Flammability (solid,gas) No information available

Flammability or explosive limits

No data available Upper Lower No data available **Vapor Pressure** No information available Vapor Density Not applicable

Specific Gravity No information available Solubility No information available Partition coefficient; n-octanol/water No data available

Autoignition Temperature Not applicable

Decomposition Temperature

No information available Not applicable **Viscosity**

Molecular Formula C5 H7 B O2 S 141.99 **Molecular Weight**

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Exposure to light. Incompatible products.

Acids, Strong bases **Incompatible Materials**

Hazardous Decomposition Products Carbon monoxide (CO₂), Carbon dioxide (CO₂), Sulfur oxides, Oxides of boron

Hazardous Polymerization No information available.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information No acute toxicity information is available for this product

Component Information

Toxicologically Synergistic No information available

Products

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

Irritation No information available

No information available Sensitization

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|-----------------------|-------------|------------|------------|------------|------------|------------|
| 4-Methylthiophene-2-b | 162607-15-0 | Not listed |
| oronic acid | | | | | | |

Mutagenic Effects No information available

No information available. **Reproductive Effects**

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Respiratory system STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and No information available

delayed

No information available **Endocrine Disruptor Information**

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Do not empty into drains.

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available.

No information available. Mobility

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.

DOT Not regulated TDG Not regulated IATA Not regulated IMDG/IMO Not regulated

15. Regulatory information

United States of America Inventory

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|----------------------------------|-------------|------|---|-----------------------------|
| 4-Methylthiophene-2-boronic acid | 162607-15-0 | = | - | - |

Legend:

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

X - Listed

^{&#}x27;-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

TSCA 12(b) - Notices of Export

Not applicable

International Inventories

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

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|----------------------------------|-------------|-----|------|--------|-------|------|------|------|-------|------|
| 4-Methylthiophene-2-boronic acid | 162607-15-0 | - | - | - | - | - | | - | - | - |

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH Not applicable

| Component | CAS No | REACH (1907/2006) - | REACH (1907/2006) - | REACH Regulation (EC |
|----------------------------------|-------------|--------------------------|---------------------------|-------------------------|
| | | Annex XIV - Substances | Annex XVII - Restrictions | 1907/2006) article 59 - |
| | | Subject to Authorization | on Certain Dangerous | Candidate List of |
| | | | Substances | Substances of Very High |
| | | | | Concern (SVHC) |
| 4-Methylthiophene-2-boronic acid | 162607-15-0 | - | - | - |

Safety, health and environmental regulations/legislation specific for the substance or mixture

| ı | Component | CAS No | OECD HPV | Persistent Organic | Ozone Depletion | Restriction of |
|---|-----------|--------|----------|--------------------|-----------------|----------------|
| | | | | | | |

4-Methylthiophene-2-boronic acid

| | | | Pollutant | Potential | Hazardous Substances (RoHS) |
|----------------------------------|-------------|----------------|----------------|----------------|--------------------------------|
| 4-Methylthiophene-2-boronic acid | 162607-15-0 | Not applicable | Not applicable | Not applicable | Not applicable |

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Other International Regulations

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|----------------------------------|-------------|---|--|-------------------------------|---------------------------------------|
| 4-Methylthiophene-2-boronic acid | 162607-15-0 | Not applicable | Not applicable | Not applicable | Not applicable |

16. Other information

Prepared By Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

Revision Date 21-Aug-2023 Print Date 21-Aug-2023

Revision Summary 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