

SAFETY DATA SHEET

Creation Date 16-November-2009 Revision Date 22-August-2023 Revision Number 3

1. Identification

Product Name Methyl 4-bromo-3-hydroxythiophene-2-carboxylate

Cat No. : GK01940EA; GK01940EB; GK01940EE; GK01940ZZ

Synonyms No information available

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Importer/Distributor Fisher Scientific One Reagent Lane
112 Colonnade Road, Fair Lawn, NJ 07410
Ottawa. ON K2E 7L6.

Canada

Tel: 1-800-234-7437

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

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Acute oral toxicity
Category 4
Acute dermal toxicity
Category 4
Acute Inhalation Toxicity
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

Harmful if swallowed, in contact with skin or if inhaled

Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation



Precautionary Statements

Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Wear protective gloves/protective clothing/eye protection/face protection

Response

Call a POISON CENTER/ doctor if you feel unwell

IF ON SKIN: Wash with plenty of soap and water

IF INHALED: Remove person to fresh air and keep comfortable for breathing

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

Take off contaminated clothing and wash it before reuse

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

3. Composition/Information on Ingredients

| Component | CAS-No | Weight % |
|---|------------|----------|
| Methyl 4-bromo-3-hydroxythiophene-2-carboxylate | 95201-93-7 | 97 |

4. First-aid measures

General Advice If symptoms persist, call a physician.

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

medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Most important symptoms/effects

Notes to Physician

None reasonably foreseeable.

Treat symptomatically

5. Fire-fighting measures

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. **Suitable Extinguishing Media**

Unsuitable Extinguishing Media No information available

No information available **Flash Point** Method -No information available

Autoignition Temperature

Explosion Limits

No information available

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. Bromine.

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.

| N | F | Р | Α |
|---|---|---|---|
|---|---|---|---|

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 2 | 1 | 0 | N/A |

Accidental release measures

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

formation.

Environmental Precautions Should not be released into the environment. See Section 12 for additional Ecological

Information.

Up

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

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

Handling Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on

clothing. Avoid ingestion and inhalation. Ensure adequate ventilation. Avoid dust formation.

Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Storage.

Materials. Strong oxidizing agents. 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

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control

hazardous materials at source

Personal protective equipment

Eve Protection Gogales

Hand Protection Wear appropriate protective gloves and clothing to prevent skin exposure.

| Glove material | Breakthrough time | Glove thickness | Glove comments |
|----------------|-------------------|-----------------|------------------------|
| Nitrile rubber | See manufacturers | - | Splash protection only |
| Neoprene | recommendations | | |
| Natural rubber | | | |
| PVC | | | |

Inspect gloves before use, observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. 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. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly Recommended Filter type: Particulates filter conforming to EN 143

When RPE is used a face piece Fit Test should be conducted

Environmental exposure controls

No information available.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

9. Physical and chemical properties

Physical State Crystalline Solid

White **Appearance**

Odor No information available **Odor Threshold** No information available No information available рH

Melting Point/Range 79 - 80 °C / 174.2 - 176 °F **Boiling Point/Range** No information available

Flash Point No information available

Evaporation Rate Not applicable

No information available Flammability (solid,gas)

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 No information available **Autoignition Temperature**

Decomposition Temperature No information available

Viscosity Not applicable Molecular Formula C6 H5 Br O3 S

Molecular Weight 237.07

10. Stability and reactivity

Methyl 4-bromo-3-hydroxythiophene-2-carboxylate

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat. Avoid dust formation.

Incompatible Materials Strong oxidizing agents, Strong bases

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Sulfur oxides, Bromine

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions 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

Irritation Irritating to eyes, respiratory system and skin

Sensitization No information available

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

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|-----------------------|------------|------------|------------|------------|------------|------------|
| Methyl | 95201-93-7 | Not listed |
| 4-bromo-3-hydroxythio | | | | | | |
| phene-2-carboxylate | | | | | | |

Mutagenic Effects No information available

Reproductive Effects No information available.

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

Endocrine Disruptor Information No information available

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

12. Ecological information

Ecotoxicity

Do not empty into drains.

Persistence and Degradability Insoluble in water

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 | Not regulated |
| DOT TDG | Not regulated |
| IATA | Not regulated |
| IMDG/IMO | Not regulated |
| | 15. Regulatory information |

International Inventories

| Component | CAS-No | DSL | NDSL | TSCA | TSCA Inventory notification - Active-Inactive | EINECS | ELINCS | NLP |
|----------------------------------|------------|-----|------|------|---|--------|--------|-----|
| Methyl | 95201-93-7 | - | - | - | - | - | - | - |
| 4-bromo-3-hydroxythiophene-2-car | | | | | | | | |
| boxylate | | | | | | | | l |

| Component | CAS-No | IECSC | KECL | ENCS | ISHL | TCSI | AICS | NZIoC | PICCS |
|----------------------------------|------------|-------|------|------|------|------|------|-------|-------|
| Methyl | 95201-93-7 | - | - | - | - | - | - | - | - |
| 4-bromo-3-hydroxythiophene-2-car | | | | | | | | | |
| boxylate | | | | | | | | | |

Legend:

X - Listed '-' - Not Listed

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

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

Other International Regulations

Authorisation/Restrictions according to EU REACH

Not applicable

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

| Component | CAS-No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|--|------------|----------------|---------------------------------|------------------------------|--|
| Methyl 4-bromo-3-hydroxythiophene- 2-carboxylate | 95201-93-7 | Not applicable | Not applicable | Not applicable | Not applicable |

| 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) |
|--|------------|---|--|-------------------------------|---------------------------------------|
| Methyl 4-bromo-3-hydroxythiophene- 2-carboxylate | 95201-93-7 | Not applicable | Not applicable | Not applicable | Not applicable |

16. Other information

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Revision SummaryThis document has been updated to comply with the requirements of WHMIS 2015 to align

with the Globally Harmonised System (GHS) for the Classification and Labelling of

Chemicals.

Disclaimer

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End of SDS