## Chemical Safety Data Sheet MSDS / SDS

## 4-(4-BROMOPHENYL)-2-HYDROXY-THIAZOLE

Revision Date:2023-11-29 Revision Number:1
SECTION 1: Identification of the substance/mixture and of the company/undertaking

## Product identifier

| Product name | $: 4-(4-B R O M O P H E N Y L)-2-H Y D R O X Y-T H I A Z O L E ~$ |
| :--- | :--- |
| CBnumber | $:$ CB8390611 |
| CAS | $: 3884-34-2$ |

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

| Relevant identified uses | : For R\&D use only. Not for medicinal, household or other use. |
| :--- | :--- |
| Uses advised against | : none |
| Company Identification |  |
| Company | : Chemicalbook |
| Address | : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing |
| Telephone | $: 400-158-6606$ |

## SECTION 2: Hazards identification

GHS Label elements, including precautionary statements
Symbol(GHS)

Signal word


Danger

## Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continuerinsing.
Hazard statements
H301 Toxic if swalloed
H315 Causes skin irritation
H318 Causes serious eye damage
H335 May cause respiratory irritation

## Substance

| Product name | $: 4-(4-$ BROMOPHENYL)-2-HYDROXY-THIAZOLE |
| :--- | :--- |
| CAS | $: 3884-34-2$ |
| MF | $:$ C9H6BrNOS |
| MW | $: 256.12$ |

## SECTION 4: First aid measures

## Description of first aid measures

## General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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
Indication of any immediate medical attention and special treatment needed

No data available

## SECTION 5: Firefighting measures

## Extinguishing media

## Suitable extinguishing media

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

## Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen bromide gas Combustible.

## Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

## Further information

No data available

## SECTION 6: Accidental release measures

## Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. 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.

## Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 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.

## Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

## Precautions for safe handling

Avoid contact with skin and eyes. 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.

Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Moisture sensitive.

Specific end use(s)

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

## SECTION 8: Exposure controls/personal protection

## control parameter

Hazard composition and occupational exposure limits
Does not contain substances with occupational exposure limits.

## Exposure controls

## Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## 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 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.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

## Body 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 environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## SECTION 9: Physical and chemical properties

## Information on basic physicochemical properties

| Appearance | solid |
| :---: | :---: |
| Odour | No data available |
| Odour Threshold | No data available |
| pH | No data available |
| Melting point/freezing point | Melting point/range: $249-253{ }^{\circ} \mathrm{C}$ |
| Initial boiling point and boiling range | No data available |
| 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 | No data available |
| Water solubility | No data available |
| Partition coefficient: n-octanol/water | log Pow: 3,533 |
| Autoignition temperature | No data available |
| Decomposition temperature | No data available |
| Viscosity | No data available |
| Explosive properties | No data available |
| Oxidizing properties | No data available |

## Other safety information

## SECTION 10: Stability and reactivity

## Reactivity

No data available

## Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

## Conditions to avoid

No data available

Incompatible materials

Strong bases, Strong oxidizing agents, Strong reducing agents

## Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen bromide gas

Other decomposition products - No data available In the event of fire: see section 5

## SECTION 11: Toxicological information

## Information on toxicological effects

## Acute toxicity

No data available
Skin corrosion/irritation
No data available
Serious eye damage/eye irritation
No data available
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.

Reproductive toxicity
No data available
Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.
Specific target organ toxicity - repeated exposure
No data available

## Aspiration hazard

No data available
Additional Information
RTECS: Not available
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## SECTION 12: Ecological information

## Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available
Mobility in soil

No data available

## Results of PBT and vPvB assessment

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

## Other adverse effects

No data available

## SECTION 13: Disposal considerations

## 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

Dispose of as unused product.

## UN number

ADR/RID: 2811 IMDG: 2811 IATA: 2811

## UN proper shipping name

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (4-(4-bromophenyl)-2-hydroxythiazole) IMDG: TOXIC SOLID, ORGANIC, N.O.S. (4-(4-bromophenyl)-2-hydroxythiazole) IATA: Toxic solid, organic, n.o.s. (4-(4-bromophenyl)-2-hydroxythiazole)

## Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

## Packaging group

ADR/RID: III IMDG: III IATA: III

## Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

Special precautions for user

No data available

## SECTION 15: Regulatory information

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

## Regulations on the Safety Management of Hazardous Chemicals

China Catalog of Hazardous chemicals 2015:Not Listed. website: https://uww.mem.gov.cn/
Measures for Environmental Management of New Chemical Substances
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Not Listed. website: https://www.mee.gov.cn/ EC Inventory:Not Listed.

European Inventory of Existing Commercial Chemical Substances (EINECS):Not Listed. website: https://echa.europa.eu/ Korea Existing Chemicals List (KECL):Not Listed. website: http://ncis.nier.go.kr

New Zealand Inventory of Chemicals (NZloC):Not Listed. website: https://www.epa.govt.nz Philippines Inventory of Chemicals and Chemical Substances (PICCS):Not Listed. website: https://emb.gov.ph/ United States Toxic Substances Control Act (TSCA) Inventory:Not Listed. website: https://www.epa.gov/

Vietnam National Chemical Inventory:Not Listed. website: https://chemicaldata.gov.vn/

## SECTION 16: Other information

## Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS: Chemical Abstracts Service
EC50: Effective Concentration 50\%
IATA: International Air Transportation Association
IMDG: International Maritime Dangerous Goods

LC50：Lethal Concentration 50\％
LD50：Lethal Dose 50\％
RID：Regulation concerning the International Carriage of Dangerous Goods by Rail
STEL：Short term exposure limit
TWA：Time Weighted Average

## References

【1】CAMEO Chemicals，website：http：／／cameochemicals．noaa．gov／search／simple
【2】ChemIDplus，website：http：／／chem．sis．nlm．nih．gov／chemidplus／chemidlite．jsp
【3】 ECHA－European Chemicals Agency，website：https：／／echa．europa．eu／
【4】eChemPortal－The Global Portal to Information on Chemical Substances by OECD，website：
http：／／www．echemportal．org／echemportal／index？pageID＝0\＆request＿locale＝en
【5】ERG－Emergency Response Guidebook by U．S．Department of Transportation，website：http：／／www．phmsa．dot．gov／hazmat／library／erg
【6】Germany GESTIS－database on hazard substance，website：http：／／www．dguv．de／ifa／gestis／gestis－stoffdatenbank／index－2．jsp
【7】 HSDB－Hazardous Substances Data Bank，website：https：／／toxnet．nlm．nih．gov／newtoxnet／hsdb．htm
【8】IARC－International Agency for Research on Cancer，website：http：／／www．iarc．fr／
【9】IPCS－The International Chemical Safety Cards（ICSC），website：http：／／www．ilo．org／dyn／icsc／showcard．home
【10】 Sigma－Aldrich，website：https：／／umw．sigmaaldrich．com／

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[^0]:    Disclaimer：
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