

ALFAAL09678

4-Aminobenzo-2,1,3-thiadiazole

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

| 产品说明: | 4-氨基苯并-2,1,3-噻二唑 |
|----------------------------|---|
| Product Description: | 4-Aminobenzo-2,1,3-thiadiazole |
| Cat No. : | L09678 |
| CAS No | 767-64-6 |
| Molecular Formula | C6 H5 N3 S |
| Supplier | Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific) Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608 |
| 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 |
| E-mail address | begel.sdsdesk@thermofisher.com |
| Recommended Use | Laboratory chemicals. |
| Uses advised against | No Information available |

SECTION 2. HAZARD IDENTIFICATION

| Physical State | Appearance | Odor |
|--|---|--------------------------|
| Solid Crystalline | Yellow | No information available |
| Harmful if swallowed. Harmful in contact wit | Emergency Overview h skin. Causes skin irritation. Causes cause respiratory irritation. | |

Classification of the substance or mixture

| Acute Oral Toxicity | Category 4 |
|--|------------|
| Acute Dermal Toxicity | Category 4 |
| Acute Inhalation Toxicity - Dusts and Mists | Category 4 |
| Skin Corrosion/Irritation | Category 2 |
| Serious Eye Damage/Eye Irritation | Category 2 |
| Specific target organ toxicity - (single exposure) | Category 3 |

Label Elements



4-Aminobenzo-2,1,3-thiadiazole

Signal Word

Warning

Hazard Statements

H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled

Precautionary Statements

Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove person to fresh air and keep 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

P312 - Call a POISON CENTER or doctor if you feel unwell

P330 - Rinse mouth

P362 + P364 - Take off contaminated clothing and wash it before reuse

Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Physical and Chemical Hazards

None identified.

Health Hazards

Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation.

Environmental hazards

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Is not likely mobile in the environment due its low water solubility. Spillage unlikely to penetrate soil.

This product does not contain any known or suspected endocrine disruptors.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS No | Weight % |
|---------------------------------|----------|----------|
| 2,1,3-Benzothiadiazol-4-ylamine | 767-64-6 | <=100 |

SECTION 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

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

Most important symptoms and effects

None reasonably foreseeable.

Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to Physician

Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which must not be used for safety reasons

No information available.

Specific Hazards Arising from the Chemical

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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

Environmental Precautions

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

Methods for Containment and Clean Up

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

Refer to protective measures listed in Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

Storage

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

Specific Use(s)

Use in laboratories

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

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Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

Exposure Controls

Engineering Measures

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

| Eye Protection | Goggles (European standard - EN 166) | | | | | | |
|---|---|----------------------|-----------------------|---|--|--|--|
| Hand Protection | Protectiv | | | | | | |
| Glove material Nitrile rubber Neoprene Natural rubber PVC | Breakthrough time See manufacturers recommendations | Glove thickness - | EU standard EN 374 | Glove comments (minimum requirement) | | | |

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure 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.

Remove gloves with care avoiding skin contamination.

| Skin and body protection | Long sleeved clothing |
|---------------------------------|--|
| Respiratory Protection | When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly |
| Large scale/emergency use | Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced Recommended Filter type: Particulates filter conforming to EN 143 |
| Small scale/Laboratory use | Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Recommended half mask:- Particle filtering: EN149:2001 When RPE is used a face piece Fit Test should be conducted |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. |
| Environmental exposure controls | No information available. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | Yellow |
|----------------|--------------------------|
| Physical State | Solid Crystalline |
| Odor | No information available |
| Odor Threshold | No data available |
| pH | No information available |

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| Melting Point/Range Softening Point Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) | 69 - 71 °C / 156.2 - 159.8 °F No data available No information available No information available Not applicable No information available | Method - No information available Solid |
|---|--|---|
| Explosion Limits | No data available | |
| Vapor Pressure Vapor Density Specific Gravity / Density Bulk Density Water Solubility Solubility in other solvents | No data available Not applicable No data available No data available Insoluble in water No information available | Solid |
| Partition Coefficient (n-octanol/wa Autoignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties | ter) No data available No data available Not applicable No information available No information available | Solid |
| Molecular Formula Molecular Weight | C6 H5 N3 S 151.19 | |

SECTION 10. STABILITY AND REACTIVITY

| Stability | Stable under normal conditions. |
|---|--|
| Hazardous Reactions Hazardous Polymerization | None under normal processing. No information available. |
| Conditions to Avoid | None known. |
| Materials to avoid | No information available. |

Hazardous Decomposition Products None under normal use conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

| Product Information | |
|---|---|
| (a) acute toxicity; | |
| (b) skin corrosion/irritation; | Category 2 |
| (c) serious eye damage/irritation; | Category 2 |
| (d) respiratory or skin sensitization; Respiratory Skin | No data available No data available |
| (e) germ cell mutagenicity; | No data available |
| (f) carcinogenicity; | No data available |
| | There are no known carcinogenic chemicals in this product |

| (g) reproductive toxicity; | No data available |
|--|---|
| (h) STOT-single exposure; | Category 3 |
| Results / Target organs | Respiratory system |
| (i) STOT-repeated exposure; | No data available |
| Target Organs | No information available. |
| (j) aspiration hazard; | Not applicable Solid |
| Symptoms / effects,both acute and delayed | No information available |
| | SECTION 12. ECOLOGICAL INFORMATION |
| Ecotoxicity effects | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. |
| Persistence and Degradability Persistence | Insoluble in water. |
| Bioaccumulative Potential | May have some potential to bioaccumulate |
| Mobility in soil | Spillage unlikely to penetrate soil Is not likely mobile in the environment due its low water solubility |
| Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential | This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance |
| | SECTION 13. DISPOSAL CONSIDERATIONS |
| Waste from Residues/Unused Products | Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations. |
| Contaminated Packaging | Dispose of this container to hazardous or special waste collection point. |
| Other Information | Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. |
| | SECTION 14. TRANSPORT INFORMATION |
| Road and Rail Transport | Not Regulated |
| IMDG/IMO | Not regulated |

4-Aminobenzo-2,1,3-thiadiazole

<u>IATA</u>

Not regulated

Special Precautions for User

No special precautions required

SECTION 15. REGULATORY INFORMATION

International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

| Component | | List of dangerous goods GB | TCSI | IECSC | EINECS | TSCA | DSL | PICCS | ENCS | ISHL | AICS | KECL |
|-------------------------------------|--------------------------------|----------------------------------|------|-------|-----------|------|-----|-------|------|------|------|----------|
| | Chemicals (2015 Edition) | 12268 - 2012 | | | | | | | | | | |
| 2,1,3-Benzothiadiazol- 4-ylamine | - | - | Х | - | 212-186-2 | - | - | - | - | | - | KE-02720 |

National Regulations

SECTION 16. OTHER INFORMATION

| Prepared By | Health, Safety and Environmental Department |
|------------------|--|
| Revision Date | 02-May-2024 |
| Revision Summary | New emergency telephone response service provider. |

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Legend

| | 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 PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances | |
| ACGIH - American Conference of Governmental Industrial Hygienists DNEL - Derived No Effect Level RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration | TWA - Time Weighted Average IARC - International Agency for Research on Cancer PNEC - Predicted No Effect Concentration LD50 - Lethal Dose 50% EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative |

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association ADR - European Agreement Concerning the International Carriage of **IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

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Dangerous Goods by Road

MARPOL - International Convention for the Prevention of Pollution from Ships ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

 $\ensuremath{\text{OECD}}$ - Organisation for Economic Co-operation and Development $\ensuremath{\text{BCF}}$ - Bioconcentration factor

Key literature references and sources for data https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

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 Safety Data Sheet