

ALFAAA12256

3,4-Dichlorophenol

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

| 产品说明: | 3,4-二氯苯酚 |
|----------------------------|---|
| Product Description: | 3,4-Dichlorophenol |
| Cat No. : | A12256 |
| Synonyms | 1-Hydroxy-3,4-dichlorobenzene. |
| CAS No | 95-77-2 |
| Molecular Formula | C6 H4 Cl2 O |
| 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 |
|--|--|--------------------------|
| Powder Solid | Brown | No information available |
| May cause damage to organs. Toxic to aqu | Emergency Overview atic life with long lasting effects. Harmfu serious eye irritation. | |

Classification of the substance or mixture

| Acute Oral Toxicity | Category 4 |
|--|------------|
| Skin Corrosion/Irritation | Category 2 |
| Serious Eye Damage/Eye Irritation | Category 2 |
| Specific target organ toxicity - (single exposure) | Category 2 |
| Acute aquatic toxicity | Category 2 |
| Chronic aquatic toxicity | Category 2 |

Label Elements

3,4-Dichlorophenol



Hazard Statements

H371 - May cause damage to organs

H411 - Toxic to aquatic life with long lasting effects

H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

Precautionary Statements

Prevention

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

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

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

Response

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

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

P332 + P313 - If skin irritation occurs: Get medical advice/attention

P337 + P313 - If eye irritation persists: Get medical advice/attention

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P330 - Rinse mouth

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

Storage

P403 - Store in a well-ventilated place

Disposal

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

Physical and Chemical Hazards

None identified.

Health Hazards

May cause damage to organs. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.

Environmental hazards

Toxic to aquatic life with long lasting effects. Will likely be mobile in the environment due to its water solubility. The product is water soluble, and may spread in water systems.

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS No | Weight % |
|--------------------|---------|----------|
| 3,4-Dichlorophenol | 95-77-2 | 99 |

SECTION 4. FIRST AID MEASURES

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 soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention.

Inhalation

Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

3,4-Dichlorophenol

Ingestion

Clean mouth with water. Get medical attention.

Most important symptoms and effects

No information available.

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

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

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. Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Ensure adequate ventilation.

Environmental Precautions

See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

Handling

Do not breathe dust. Do not get in eyes, on skin, or on clothing. Handle product only in closed system or provide appropriate exhaust ventilation. Wash thoroughly after handling.

Storage

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

Specific Use(s)

Use in laboratories

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

3,4-Dichlorophenol

Control Parameters

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 adequate ventilation, especially in confined areas. 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

| 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 Wear appropriate protective gloves and clothing to prevent skin exposure | |
|---|---|
| Respiratory Protection | No protective equipment is needed under normal use conditions. |
| 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 |
| Small scale/Laboratory use | Maintain adequate ventilation |
| | |
| 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 Physical State | Brown Powder Solid |
|------------------------------|-------------------------------|
| Odor | No information available |
| Odor Threshold | No data available |
| рН | No information available |
| Melting Point/Range | 65 - 68 °C / 149 - 154.4 °F |
| Softening Point | No data available |
| Boiling Point/Range | 145 - 146 °C / 293 - 294.8 °F |

3,4-Dichlorophenol

| Flash Point Evaporation Rate Flammability (solid,gas) Explosion Limits | No information available Not applicable No information available No data available | Method - No information available Solid |
|---|---|--|
| 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 slightly soluble No information available | Solid |
| Partition Coefficient (n-octanol/wa Autoignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties | ater) No data available No data available Not applicable No information available No information available | Solid |
| Molecular Formula Molecular Weight | C6 H4 Cl2 O 163 | |

SECTION 10. STABILITY AND REACTIVITY

| Stability | Stable under normal conditions. |
|---|---|
| Hazardous Reactions Hazardous Polymerization | No information available. Hazardous polymerization does not occur. |
| Conditions to Avoid | Excess heat. Incompatible products. |
| Materials to avoid | Acid anhydrides. Acid chlorides. |

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrogen chloride gas.

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
SkinNo 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

3,4-Dichlorophenol

| (h) STOT-single exposure; | No data available |
|--|--|
| (i) STOT-repeated exposure; Target Organs | No data available No information available. |
| (j) aspiration hazard; | Not applicable Solid |
| Other Adverse Effects | The toxicological properties have not been fully investigated. |
| Symptoms / effects,both acute and delayed | No information available |

.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

| Component | Freshwater Fish | Water Flea | Freshwater Algae | Microtox | |
|--|---|------------|------------------|------------------------|--|
| 3,4-Dichlorophenol | | | | EC50 = 2.6 mg/L 15 min | |
| Persistence and Degradability Persistence | Soluble in water, Persistence is unlikely, based on information available. | | | | |
| Bioaccumulative Potential | Bioaccumulation is unlikely | | | | |
| Mobility in soil | The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility Highly mobile in soils | | | | |
| 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 Direct 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 prod was used. Do not empty into drains. | | | | |
| SECTION 14. TRANSPORT INFORMATION | | | | | |

SECTION 14. TRANSPORT INFORMATION

Road and Rail Transport

| UN-No | UN2020 |
|----------------------|----------------------|
| Proper Shipping Name | CHLOROPHENOLS, SOLID |
| Hazard Class | 6.1 |
| Packing Group | 111 |

3,4-Dichlorophenol

IMDG/IMO

| UN-No Proper Shipping Name Hazard Class Packing Group | UN2020 CHLOROPHENOLS, SOLID 6.1 III |
|--|--|
| IATA UN-No Proper Shipping Name Hazard Class Packing Group | UN2020 CHLOROPHENOLS, SOLID 6.1 III |
| 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 | The | List of | TCSI | IECSC | EINECS | TSCA | DSL | PICCS | ENCS | ISHL | AICS | KECL |
|--------------------|-----|--|------|-------|-----------|------|-----|-------|------|------|------|----------|
| | | dangerous goods GB 12268 - 2012 | | | | | | | | | | |
| 3,4-Dichlorophenol | X | - | X | Х | 202-450-5 | Х | - | Х | Х | Х | - | KE-10170 |

National Regulations

SECTION 16. OTHER INFORMATION

| Prepared By | Health, Safety and Environmental Department |
|------------------|--|
| Revision Date | 27-Apr-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

| CAS - Chemical Abstracts Service | TSCA - United States Toxic Substances Control Act Section 8(b) Inventory |
|--|--|
| EINECS/ELINCS - European Inventory of Existing Commercial Chemical | DSL/NDSL - Canadian Domestic Substances List/Non-Domestic |
| Substances/EU List of Notified Chemical Substances | Substances List |
| PICCS - Philippines Inventory of Chemicals and Chemical Substances | ENCS - Japanese Existing and New Chemical Substances |
| IECSC - Chinese Inventory of Existing Chemical Substances | AICS - Australian Inventory of Chemical Substances |
| KECL - Korean Existing and Evaluated Chemical Substances | NZIOC - New Zealand Inventory of Chemicals |

3,4-Dichlorophenol

| WEL - Workplace Exposure Limit | TWA - Time Weighted Average |
|--|---|
| ACGIH - American Conference of Governmental Industrial Hygienists | IARC - International Agency for Research on Cancer |
| DNEL - Derived No Effect Level | PNEC - Predicted No Effect Concentration |
| RPE - Respiratory Protective Equipment | LD50 - Lethal Dose 50% |
| LC50 - Lethal Concentration 50% | EC50 - Effective Concentration 50% |
| NOEC - No Observed Effect Concentration | POW - Partition coefficient Octanol:Water |
| PBT - Persistent, Bioaccumulative, Toxic | vPvB - very Persistent, very Bioaccumulative |
| ICAO/IATA - International Civil Aviation Organization/International Air Transport Association | IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code |
| ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road | MARPOL - International Convention for the Prevention of Pollution from Ships |
| OECD - Organisation for Economic Co-operation and Development | ATE - Acute Toxicity Estimate |
| BCF - Bioconcentration factor | VOC - (Volatile Organic Compound) |
| 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