

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification

1.1 Product identifiers

Product Name: 2,4-Dichlorobenzoic acid

Cat No.: AC160900000; AC160900010; AC160900050; AC160901000;

AC160902500

CAS No.: 50-84-0

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

Recommended uses: Laboratory chemicals

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

1.3 Details of the supplier of the safety data sheet

Company: Krishna Solvechem Limited.

B/503, Sahayog, S. V. Road,

Kandivali (West), Mumbai – 400067. India.

Telephone: +91-22-6123 0222
Email: exports@kscl.co.in

1.4 Emergency telephone number

Emergency Phone : +91-8657457330

SECTION 2: Hazards identification

2.1 Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Acute oral toxicity | (Category 4) | |
|--|--------------|--|
| Skin Corrosion/Irritation | (Category 2) | |
| Serious Eye Damage/Eye Irritation | (Category 2) | |
| Specific target organ toxicity (single exposure) | (Category 3) | |
| Target Organs - Respiratory system. | | |

2.2 Label elements

Pictogram:



Signal word Warning

Hazard statement (s) Harmful if swallowed



Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation

Precautionary statement (s)

Prevention

Wash face, hands and any exposed skin thoroughly after handling

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

Do not eat, drink or smoke when using this product 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

IF ON SKIN (or hair):

If skin irritation occurs: Get medical advice/attention IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing 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

Ingestion:

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth

Storage:

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



Disposal:

Dispose of contents/container to an approved waste disposal

plant

Hazards not otherwise classified (HNOC)

None identified

SECTION 3: Composition / information on ingredients

3.1

| Component | CAS-No | Weight % |
|----------------------------|---------|----------|
| Benzoic acid, 2,4-dichlro- | 50-84-0 | >95 |

| | SECTION 4: First aid measures | | | |
|-----|---------------------------------------|---|--|--|
| 4.1 | Description of first aid measures | | | |
| | General Advice: | If symptoms persist, call a physician. | | |
| | If inhalation : | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. | | |
| | In case of skin contact : | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. | | |
| | In case of eye contact : | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. | | |
| | Ingestion: | Clean mouth with water and drink afterwards plenty of water. | | |
| 4.2 | Most important symptoms and effects : | None reasonably foreseeable | | |
| 4.3 | Notes to Physician : | Treat symptomatically | | |

SECTION 5: Firefighting effects

5.1 Extinguishing media

Suitable extinguishing media Water spray, carbon dioxide (CO2), dry chemical, alcohol-

resistant foam.

Unsuitable Extinguishing

Media::

No information available

5.2 Flash Point : No information available **Method :** No information available



Autoignition Temperature:

No information available

Explosion Limits:

UpperNo data availableLowerNo data available

Sensitivity to Mechanical

Impact

No information available

Sensitivity to Static No information available

Discharge

Specific Hazards Arising from

the Chemical:

Keep the product and empty container away from heat and

sources of ignition

Hazardous Combustion

Products:

Carbon monoxide (CO). Carbon dioxide (CO2).

5.4 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 | 1 | 0 | N/A |

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

Should not be released into the environment.

6.3 Methods and materials for containment and cleaning up

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

SECTION 7: Handling and storage

7.1 Precautions for safe 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.



7.2 Conditions for safe storage

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible Materials. Strong acids. Strong bases. Oxidizing agent.

SECTION 8: Exposure controls/personal protection

8.1 Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

8.2 Exposure controls

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.

Skin protection and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

No protective equipment is needed under normal use conditions

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice..

| | SECTION 9: Physical and chemical properties | | | |
|-----|---|-------------------------------|--|--|
| 9.1 | 9.1 Information on basic physical and chemical properties | | | |
| | a) Appearance | White solid powder | | |
| | b) Odour | Odorless | | |
| | c) Odour Threshold | No information available | | |
| | d) pH | 2.8 | | |
| | e) Melting point / freezing point | 160 - 164 °C / 320 - 327.2 °F | | |
| | f) Initial boiling point and | No information available | | |



| boiling range | |
|---|--------------------------|
| g) Flash point | No information available |
| h) Evaporation rate | No information available |
| i) Flammability (solid, gas) | Not applicable |
| j) Upper/lower | No data available |
| flammability or | No data available |
| explosive limits | |
| k) Vapour pressure | No information available |
| l) Vapour density | Not applicable |
| m) Specific Gravity | No information available |
| n) Solubility | Insoluble in water |
| o) Partition coefficient: n octanol/water | No data available |
| p) Auto-ignition temperature | No information available |
| q) Decomposition temperature | No data available |
| r) Viscosity | No information available |
| s) Molecular formula | C7 H4 Cl2 O2 |
| t) Molecular Weight | 191.01 |
| | |

| | SECTION 10: Stability and Reactivity | | | | |
|------|--------------------------------------|---|--|--|--|
| 10.1 | Reactive Hazard : | None known, based on information available | | | |
| 10.2 | Chemical stability: | No information available | | | |
| 10.3 | Possibility of hazardous reactions : | None under normal processing. | | | |
| 10.4 | Conditions to avoid : | Incompatible products. Avoid dust formation | | | |
| 10.5 | Incompatible materials: | Strong oxidizing agents, Strong bases, strong acids | | | |
| 10.6 | Hazardous decomposition products : | Carbon monoxide (CO), Carbon dioxide (CO2) | | | |
| 10.7 | Hazardous Polymerization | No information available | | | |



SECTION 11: Toxicological information

11.1

Information on toxicological effects

Acute toxicity:

Product Information:

Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|--------------------|-----------|-------------|-----------------|
| Benzoic acid, 2,4- | 830 mg/kg | Not listed | Not listed |
| dichloro- | (mouse) | | |

Toxicologically Synergistic Products No information available

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

Irritation : May cause irritation of respiratory tract irritating

to eyes and skin

Sensitization: No information available

Carcinogenicity: The table below indicates whether each agency ha

Any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---------------|---------|------------|--------|------------|------------|------------|
| Benzoic acid, | 50-84-0 | Not listed | Not | Not listed | Not listed | Not listed |
| 2,4-dichloro- | | | listed | | | |

| 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 delayed: | No information available |

Endocrine Disruptor Information : No information available

Other Adverse Effects: The toxicological properties have not been fully

investigated.



| | SECTION 12: Ecological information | | | | |
|---------------|------------------------------------|--|--|--|--|
| 12.1 Ecoto | oxicity: | Do not empty into drains. | | | |
| 12.2 | Persistence and degradability: | Insoluble in water Persistence is unlikely based on information Available. | | | |
| | Bioaccumulation/ Accumulation | No information available | | | |
| 12.3 | Mobility: | No information available. Log pow : 2.82 | | | |

SECTION 13: Disposal considerations

13.1 Waste treatment 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.

| | SECTION 14: Transport information | |
|------------|-----------------------------------|--|
| 14.1 DOT: | Not regulated | |
| 14.2 TDG: | Not regulated | |
| 14.3 IATA: | Not regulated | |
| 14.4 IMDG: | Not regulated | |

SECTION 15: Regulatory information

15.1 United states of America Inventory:

| Component | CAS-No | TSCA | TSCA Inventory notification Active/Inactive | TSCA - EPA Regulatory Flags |
|-------------------------------|---------|------|---|--------------------------------|
| Benzoic acid, 2,4-dichloro | 50-84-0 | X | ACTIVE | - |

Legend:



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

X - Listed
'-' - Not Listed

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 (ECL).

| Component | CAS-No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|--------------------------------|---------|-----|------|-----------|-------|------|------|------|-------|----------|
| Benzoic acid, 2,4-dichloro- | 50-84-0 | - | Х | 200-067-8 | Х | Х | Х | Х | Х | KE-10071 |

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.

15.2 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 - This product does not contain the any DHS Chemicals. **Security**

Other International Regulations

Mexico – Grade No information available

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

| 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) | |
| Benzoic acid, 2,4-dichloro- | 50-84-0 | Not applicable | Not applicable | Not applicable | Not applicable | |
| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantitiesfor Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantitiesfor Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) | |
| Benzoic acid, 2,4-dichloro- | 50-84-0 | Not applicable | Not applicable | Not applicable | Not applicable | |

SECTION 16: Other information

16.1 Prepared By: Regulatory affairs

Krishna Solvechem

Limited

Email: exports@kscl.co.in

Creation Date:23-Mar-2012Revision Date:19-Jan-2023Print Date:19-Jan-2023

Revision Summary: This document has been updated to comply with the US OSHA

HazCom 2012 Standard replacing the current legislation under29 C F R 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of

Chemicals (GHS).

16.2 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 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.