CAS No: 583-39-1 MSDS



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance

:

CAS No : 583-39-1 Product code : B-01649

Chemical structure :

SH

Synonyms : 2-Benzimidazolethiol

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Bio-Chem Chemicals 5455, Nicholson Road Science Market, Ambala Cantt. 13001 Haryana (India) +91-829541953

info@biofinechemical.com wwwbiofinechemical.com

1.4. Emergency telephone number

Emergency number : + 91 99921 51495 (10.00am- 06.30pm) (Office Hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC)

Acute toxicity (oral), H301 Category 3

Acute toxicity (dermal), H312

Category 4

Acute toxicity (inhal.), H332

Category 4

Skin corrosion/irritation, H315

Category 2

Serious eye damage/eye H319

irritation, Category 2

Specific target organ H335

toxicity — Single exposure, Category 3,

1/11

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Respiratory tract irritation

Full text of classification categories and H statements : see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

Xn; R20/21/22 Xi; R36/37/38

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Hazard pictograms (CLP)

GHS06

Signal word (CLP) : Danger

Hazard statements (CLP) : H301 - Toxic if swallowed

H312+H332 - Harmful in contact with skin or if inhaled

H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation

Precautionary statements (CLP) : 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. Continue rinsing

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : 2-MERCAPTOBENZIMIDAZOLE FOR SYNTHESIS

CAS No : 583-39-1

Full text of R- and H-phrases: see section 16

Safety Data Sheet

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : 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.

First-aid measures after skin contact : Immediately call a POISON CENTER or doctor/physician. Specific measures (see ...

on this label). Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific

treatment (see ... on this label).

First-aid measures after eye contact : 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.

First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Repeated exposure to this material can result in absorption through skin causing

significant health hazard. Harmful in contact with skin. Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clear up rapidly by scoop or vacuum.

6.4. Reference to other sections

No additional information available

Safety Data Sheet

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-

ventilated area.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash ... thoroughly after

handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Store in original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection : protective gloves

Eye protection : Chemical goggles or safety glasses
Skin and body protection : Wear suitable protective clothing

Respiratory protection : Wear appropriate mask

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Molecular mass : 150.2 g/mol Colour : White powder.

Odour : No data available

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Melting point : 300 - 304

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

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Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Solubility : No data available

Log Pow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Direct sunlight. Air contact. Moisture.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Dermal: Harmful in contact with skin. Inhalation: Harmful if

inhaled.

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single : May cause respiratory irritation.

exposure)

Safety Data Sheet

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

Potential adverse human health effects

and symptoms

: Harmful if swallowed. Harmful in contact with skin.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations

: Dispose of contents/container to ...

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

 UN-No. (ADR)
 : 2811

 UN-No. (IMDG)
 : 2811

 UN-No.(IATA)
 : 2811

 UN-No.(ADN)
 : 2811

 UN-No. (RID)
 : 2811

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14.2. UN proper shipping name

Proper Shipping Name (ADR) : TOXIC SOLID, ORGANIC, N.O.S.
Proper Shipping Name (IMDG) : TOXIC SOLID, ORGANIC, N.O.S.
Proper Shipping Name (IATA) : TOXIC SOLID, ORGANIC, N.O.S.
Proper Shipping Name (ADN) : TOXIC SOLID, ORGANIC, N.O.S.
Proper Shipping Name (RID) : TOXIC SOLID, ORGANIC, N.O.S.

Transport document description (ADR) : UN 2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, III, (E)
Transport document description (IMDG) : UN 2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, III
Transport document description (IATA) : UN 2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, III
Transport document description (ADN) : UN 2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, III
Transport document description (RID) : UN 2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 6.1 Danger labels (ADR) : 6.1



IMDG

Transport hazard class(es) (IMDG) : 6.1 Danger labels (IMDG) : 6.1



IATA

Transport hazard class(es) (IATA) : 6.1 Hazard labels (IATA) : 6.1



ADN

Transport hazard class(es) (ADN) : 6.1 Danger labels (ADN) : 6.1



RID

Transport hazard class(es) (RID) : 6.1

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Danger labels (RID) : 6.1

14.4. Packing group

Packing group (ADR) : 111 Packing group (IMDG) : 111 : 111 Packing group (IATA) : 111 Packing group (ADN) Packing group (RID) : 111

14.5. **Environmental hazards**

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : T2 Special provision (ADR) : 274, 614 Limited quantities (ADR) : 5kg Excepted quantities (ADR) : E1

Packing instructions (ADR) : P002, IBC08, LP02, R001

Special packing provisions (ADR) : B3 Mixed packing provisions (ADR) : MP10 Portable tank and bulk container : T1

instructions (ADR)

Portable tank and bulk container special

provisions (ADR)

: TP33

: SGAH, L4BH Tank code (ADR) Tank special provisions (ADR) : TU15, TE19

Vehicle for tank carriage : AT Transport category (ADR)

Special provisions for carriage - Bulk : VC1, VC2, AP7

(ADR)

Special provisions for carriage - Loading,

unloading and handling (ADR)

: CV13, CV28

Special provisions for carriage - Operation : S9

Hazard identification number (Kemler No.)

Orange plates

Tunnel restriction code (ADR) : E : 2X EAC code

- Transport by sea

Special provision (IMDG) : 223, 274 Limited quantities (IMDG) : 5 kg Excepted quantities (IMDG) : E1

Safety Data Sheet

Packing instructions (IMDG) : P002 IBC packing instructions (IMDG) : IBC08 : B3 IBC special provisions (IMDG) Tank instructions (IMDG) : T1 Tank special provisions (IMDG) : TP33 EmS-No. (Fire) : F-A EmS-No. (Spillage) : S-A Stowage category (IMDG) : A MFAG-No : 154

- Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y645
PCA limited quantity max net quantity : 10kg

(IATA)

PCA packing instructions (IATA) : 670
PCA max net quantity (IATA) : 100kg
CAO packing instructions (IATA) : 677
CAO max net quantity (IATA) : 200kg
Special provision (IATA) : A3, A5
ERG code (IATA) : 6L

- Inland waterway transport

Classification code (ADN) : T2

Special provisions (ADN) : 274, 614, 802

Limited quantities (ADN) : 5 kg

Excepted quantities (ADN) : E1

Carriage permitted (ADN) : T

Equipment required (ADN) : PP, EP

Number of blue cones/lights (ADN) : 0

- Rail transport

Classification code (RID) : T2

Special provision (RID) : 274, 614

Limited quantities (RID) : 5kg

Excepted quantities (RID) : E1

Packing instructions (RID) : P002, IBC08, LP02, R001

Special packing provisions (RID) : B3

Mixed packing provisions (RID) : MP10

Portable tank and bulk container : T1

instructions (RID)

Portable tank and bulk container special

provisions (RID)

: TP33

Tank codes for RID tanks (RID) : SGAH, L4BH

Special provisions for RID tanks (RID) : TU15
Transport category (RID) : 2

Special provisions for carriage – Bulk : V

(RID)

: VC1, VC2, AP7

Special provisions for carriage - Loading

and unloading (RID)

: CW13, CW28, CW31

Colis express (express parcels) (RID) : CE11
Hazard identification number (RID) : 60

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Safety Data Sheet

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

2-MERCAPTOBENZIMIDAZOLE FOR SYNTHESIS is not on the REACH Candidate List

2-MERCAPTOBENZIMIDAZOLE FOR SYNTHESIS is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 2, hazardous to water (Classification according to

VwVwS, Annex 3; WGK No 6614)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BlmSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct

contact with the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H301	Toxic if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed

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R36/37/38	Irritating to eyes, respiratory system and skin
Xi	Irritant
Xn	Harmful

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product