

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Reference number: 04162 Issue date: 6/17/2024 Revision date: 6/17/2024 Supersedes version of: 4/9/2015 Version: 1.0

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

1.1. Product identifier

Product form : Substance

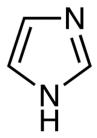
Trade name : IMIDAZOLE MOLECULAR BIOLOGY

EC Index-No. : 613-319-00-0 EC-No. : 206-019-2 CAS-No. : 288-32-4 Product code : 04162

Type of product : Heterocyclic organic compound

Formula : C3H4N2

Chemical structure



Synonyms : Glyoxaline, 1,3-Diazole,1H-Imidazole

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

LOBA CHEMIE PVT.LTD.

107 Wode House Road, Jehangir Villa, Colaba

400005 Mumbai

INDIA

T +91 22 6663 6663, F +91 22 6663 6699

info@lobachemie.com, www.lobachemie.com

1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4 H302
Skin corrosion/irritation, Category 1, Sub-Category 1C H314
Reproductive toxicity, Category 1B H360D

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

May damage fertility or the unborn child. Harmful if swallowed. Causes severe skin burns and eye damage.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP) : Danger

Hazard statements (CLP) H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

H360D - May damage the unborn child.

Precautionary statements (CLP) : P201 - Obtain special instructions before use.

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

P280 - Wear protective clothing, eye protection, face protection, protective gloves. P301+P312 - IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell. P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Nordic countries regulation

Denmark

MAL code : 00-3 (Executive Order No. 301 from 1993)

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%
IMIDAZOLE	CAS-No.: 288-32-4 EC-No.: 206-019-2 EC Index-No.: 613-319-00-0	100

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

First-aid measures after inhalation

First-aid measures after skin contact

First-aid measures after eye contact

First-aid measures after ingestion

: Call a physician immediately.

Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER/doctor. Call a physician immediately.

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Call a physician

Rinse mouth. Call a POISON CENTER/doctor if you feel unwell. Do NOT induce vomiting.

Immediately call a POISON CENTER/doctor. Do not induce vomiting. Call a physician immediately.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

Symptoms/effects : Causes severe skin burns and eye damage.

Symptoms/effects after inhalation : Dust of the product, if present, may cause respiratory irritation after an excessive inhalation

exposure. Although no appropriate human or animal health effects data are known to exist,

this material is expected to be an inhalation hazard.

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

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

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard. Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper

protective equipment, including respiratory protection.

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

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent

material damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Evacuate unnecessary personnel. Only qualified personnel equipped with suitable

protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Use personal protective

equipment as required. For further information refer to section 8: "Exposure

controls/personal protection".

Emergency procedures : Stop release. Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.

Methods for cleaning up : Mechanically recover the product. Clean up immediately by sweeping or vacuum. Notify

authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6/17/2024 (Revision date) EN (English) 3/12

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed

Not expected to present a significant hazard under anticipated conditions of normal use.Ensure good ventilation of the work station. Do not breathe

Precautions for safe handling

dust/fume/gas/mist/vapours/spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective

equipment. Avoid contact with skin and eyes.

Hygiene measures

Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse. Separate working clothes from town clothes. Launder separately. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Comply with applicable regulations.

Storage conditions

: Store in original container. Keep container tightly closed. Store in a dry place. Store locked

up.

Packaging materials

: Store always product in container of same material as original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Personal protective equipment symbol(s):







6/17/2024 (Revision date) EN (English) 4/12

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear a mask

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Colour : White to off white.

Appearance : Crystalline powder or crystals. Flakes.

Molecular mass : 68.08 g/mol : amine like. Odour Odour threshold : Not available : 88 - 91 °C Melting point Freezing point : Not applicable 256 °C Boiling point Flammability Non flammable. Lower explosion limit : Not applicable Upper explosion limit : Not applicable

Flash point : 145 °C

Auto-ignition temperature : Not applicable

Decomposition temperature : Not available

pH : 9.5 – 11

pH solution concentration : 5 %

Viscosity, kinematic : Not applicable Viscosity, dynamic : $2.696 \, \text{Pa} \cdot \text{s}$ at $100 \, ^{\circ}\text{C}$

Solubility : Water: 663 g/l at 20 °C - Soluble in water Ethanol: Soluble

Ether: Soluble
Acetone: Soluble
: Not available

Partition coefficient n-octanol/water (Log Pow) : 0.02

Partition coefficient n-octanol/water (Log Kow)

Vapour pressure : 0.003 hPa at 20 °C
Vapour pressure at 50 °C : Not available
Density : 1.03 g/cm³
Relative density : Not available
Relative vapour density at 20 °C : 2.35 (Air = 1)
Particle size : Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

6/17/2024 (Revision date) EN (English) 5/12

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates: Corrosive vapours.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Moisture. Air contact.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Thermal decomposition generates: Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

: Harmful if swallowed. Acute toxicity (oral) Acute toxicity (dermal) Not classified Acute toxicity (inhalation) : Not classified

Skin corrosion/irritation Causes severe skin burns.

pH: 9.5 – 11

Serious eye damage/irritation : Assumed to cause serious eye damage

pH: 9.5 - 11 : Not classified

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

Reproductive toxicity : May damage the unborn child.

STOT-single exposure : Not classified STOT-repeated exposure : Not classified Aspiration hazard : Not classified

IMIDAZOLE MOLECULAR BIOLOGY (288-32-4)

Not applicable Viscosity, kinematic

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms

: Harmful if swallowed.

6/17/2024 (Revision date) EN (English) 6/12

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Hazardous to the aquatic environment, short-term : Not classified

(acute)

Hazardous to the aquatic environment, long-term : Not

(chronic)

: Not classified

12.2. Persistence and degradability

IMIDAZOLE MOLECULAR BIOLOGY (288-32-4)

Persistence and degradability Rapidly degradable

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. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance

with local, regional, national and/or international regulation. Disposal must be done

according to official regulations.

Additional information : Do not re-use empty containers.

SECTION 14: Transport information

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

14.1. UN number or ID number

 UN-No. (ADR)
 : UN 3263

 UN-No. (IMDG)
 : UN 3263

 UN-No. (IATA)
 : UN 3263

 UN-No. (ADN)
 : UN 3263

 UN-No. (RID)
 : UN 3263

14.2. UN proper shipping name

Proper Shipping Name (ADR)

: CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.
Proper Shipping Name (IMDG)

: CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.

Proper Shipping Name (IATA) : Corrosive solid, basic, organic, n.o.s.

6/17/2024 (Revision date) EN (English) 7/12

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Proper Shipping Name (ADN) : CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. Proper Shipping Name (RID) : CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.

Transport document description (ADR) : UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (IMIDAZOLE), 8, II, (E)
Transport document description (IMDG) : UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (IMIDAZOLE), 8, II

Transport document description (IATA)

: UN 3263 Corrosive solid, basic, organic, n.o.s. (IMIDAZOLE), 8, II

Transport document description (ADN)

: UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., 8, II

Transport document description (RID)

: UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., 8, II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 8
Danger labels (ADR) : 8



IMDG

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8



IATA

Transport hazard class(es) (IATA) : 8
Danger labels (IATA) : 8



ADN

Transport hazard class(es) (ADN) : 8
Danger labels (ADN) : 8



RID

Transport hazard class(es) (RID) : 8
Danger labels (RID) : 8



14.4. Packing group

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

14.5. Environmental hazards

Dangerous for the environment : No

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : C8
Special provisions (ADR) : 274
Limited quantities (ADR) : 1kg
Excepted quantities (ADR) : E2
Packing instructions (ADR) : P002, IBC08

Special packing provisions (ADR) : B4

Mixed packing provisions (ADR) : MP10

Portable tank and bulk container instructions (ADR) : T3

Portable tank and bulk container special provisions : TP33

(ADR)

Tank code (ADR) : SGAN, L4BN

Vehicle for tank carriage : AT
Transport category (ADR) : 2
Special provisions for carriage - Packages (ADR) : V11
Hazard identification number (Kemler No.) : 80

Orange plates :

| Control | Contro

80 3263

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

Transport by sea

: 274 Special provisions (IMDG) Limited quantities (IMDG) : 1 kg Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P002 IBC packing instructions (IMDG) : IBC08 IBC special provisions (IMDG) : B21, B4 Tank instructions (IMDG) : T3 Tank special provisions (IMDG) : TP33 : F-A EmS-No. (Fire) : S-B EmS-No. (Spillage) : B Stowage category (IMDG)

Segregation (IMDG) : SGG18, SG35

Properties and observations (IMDG) : Reacts violently with acids. Causes burns to skin, eyes and mucous membranes.

MFAG-No : 154

Air transport

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) Y844 PCA limited quantity max net quantity (IATA) 5kg PCA packing instructions (IATA) 859 PCA max net quantity (IATA) 15kg CAO packing instructions (IATA) 863 CAO max net quantity (IATA) : 50kg Special provisions (IATA) : A3, A803 ERG code (IATA) : 8L

Inland waterway transport

Classification code (ADN) : C8
Special provisions (ADN) : 274
Limited quantities (ADN) : 1 kg
Excepted quantities (ADN) : E2
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Rail transport

Classification code (RID) : C8
Special provisions (RID) : 274
Limited quantities (RID) : 1kg
Excepted quantities (RID) : E2
Packing instructions (RID) : P002, IBC08

Special packing provisions (RID) : B4

Mixed packing provisions (RID) : MP10

Portable tank and bulk container instructions (RID) : T3

Portable tank and bulk container special provisions : TP33

(RID)

Tank codes for RID tanks (RID) : SGAN, L4BN

Transport category (RID) : 2
Special provisions for carriage – Packages (RID) : W11
Colis express (express parcels) (RID) : CE10
Hazard identification number (RID) : 80

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
30.	IMIDAZOLE MOLECULAR BIOLOGY

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV; ID No. 1448).

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Chemicals Prohibition Ordinance (ChemVerbotsV) : This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must

be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the

shipping route (according to § 10).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen

SZW-lijst van reprotoxische stoffen – Borstvoeding

SZW-lijst van reprotoxische stoffen -

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen - Ontwikkeling

: The substance is not listed

The substance is not listedThe substance is not listed

: IMIDAZOLE is listed

Denmark

MAL code : 00-3 (Executive Order No. 301 from 1993)

Danish National Regulations : 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 chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:		
OEL	Occupational Exposure Limit	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H360D	May damage the unborn child.
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C

Safety Data Sheet (SDS), EU

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.