

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 Trade name EC Index-No. EC-No. CAS-No. Product code Type of product Formula Chemical structure

Substance IMIDAZOLE MOLECULAR BIOLOGY 613-319-00-0 206-019-2 288-32-4 04162 Heterocyclic organic compound C3H4N2

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.

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2.2. Label elements	
Labelling according to Regulation (EC)	No. 1272/2008 [CLP]
Hazard pictograms (CLP)	
	GHS05 GHS07 GHS08
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	 Call a physician immediately. Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air
First-aid measures after skin contact	 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.
First-aid measures after eye contact	: 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 immediately.
First-aid measures after ingestion	 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.

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4.2. Most important symptoms and effects, both acute and delayed	
Symptoms/effects Symptoms/effects after inhalation	 Causes severe skin burns and eye damage. 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 Symptoms/effects after eye contact Symptoms/effects after ingestion	:Burns. :Serious damage to eyes. :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 Unsuitable extinguishing media	: Water spray. Dry powder. Foam. : Do not use a heavy water stream.	
5.2. Special hazards arising from the subs	tance or mixture	
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	 No fire hazard. No direct explosion hazard. Toxic fumes may be released. 	
5.3. Advice for firefighters		
Firefighting instructions Protection during firefighting	 Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. 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 equip	ment 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.

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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 Precautions for safe handling Hygiene measures	 Not expected to present a significant hazard under anticipated conditions of normal use. Ensure good ventilation of the work station. Do not breathe 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. 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, includi	ng any incompatibilities
Technical measures Storage conditions Packaging materials	 Comply with applicable regulations. Store in original container. Keep container tightly closed. Store in a dry place. Store locked up. 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

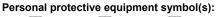
Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.





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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.

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
Odour	: amine like.
Odour threshold	: Not available
Melting point	: 88 – 91 °C
Freezing point	: Not applicable
Boiling point	: 256 °C
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
рН	: 9.5 – 11
pH solution concentration	: 5%
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: 2.696 Pa⋅s at 100 °C
Solubility	: Water: 663 g/l at 20 °C - Soluble in water
	Ethanol: Soluble
	Ether: Soluble
	Acetone: Soluble
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: 0.02
Vapour pressure	: 0.003 hPa at 20 °C
Vapour pressure at 50°C	: Not available
Density	: 1.03 g/cm ³
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

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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.

11.1. Information on hazard classes	as defined in Regulation (EC) No 1272/2008
Acute toxicity (oral)	: Harmful if swallowed.
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
Respiratory or skin sensitisation	: Not classified
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 BIOLOG	Y (288-32-4)
Viscosity, kinematic	Not applicable
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	: Harmful if swallowed.
symptoms	

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SECTION 12: Ecological information		
12.1. Toxicity		
Hazardous to the aquatic environment, short–term : (acute)	Before neutralisation, the product may represent a danger to aquatic organisms. Not classified 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 Waste treatment methods	 Disposal must be done according to official regulations. 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-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID)	: UN 3263 : UN 3263 : UN 3263 : UN 3263 : UN 3263
14.2. UN proper shipping name	
Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. Corrosive solid, basic, organic, n.o.s.

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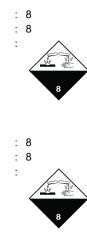
Proper Shipping Name (ADN) Proper Shipping Name (RID)	: CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. : CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.
Transport document description (ADR)	: UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (IMIDAZOLE), 8, II, (E)
Transport document description (IMDG)	: UN 3263 CORROSIVE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

IMDG

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



ΙΑΤΑ

ADN

RID

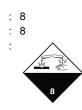
Transport hazard class(es) (IATA) Danger labels (IATA)

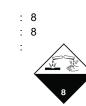
Transport hazard class(es) (ADN)

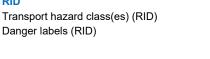
Danger labels (ADN)

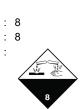
Transport hazard class(es) (IMDG)

Danger labels (IMDG)









14.4. Packing group			
Packing group (ADR) Packing group (IMDG) Packing group (IATA) Packing group (ADN)	: : : :		
Packing group (RID) 14.5. Environmental hazards Dangerous for the environment	: II : No		

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Marine pollutant Other information	: No : 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
	: MP10 : T3
	: TP33
(ADR)	
Tank code (ADR)	: SGAN, L4BN
Vehicle for tank carriage	: AT
Transport category (ADR)	: 2
	: V11
Hazard identification number (Kemler No.)	: 80
Orange plates	¹ 80
	3263
Tunnel restriction code (ADR)	: E
	: 2X
Transport by sea	
Special provisions (IMDG)	: 274
,	: 1 kg
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P002 : IBC08
IBC packing instructions (IMDG) IBC special provisions (IMDG)	: B21, B4
Tank instructions (IMDG)	: T3
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
	: S-B
	: В
	: SGG18, SG35
Properties and observations (IMDG)	: Reacts violently with acids. Causes burns to skin, eyes and mucous membranes.
MFAG-No	: 154
Air transport	
-	: E2
PCA Limited quantities (IATA)	: Y844
	: 5kg
PCA packing instructions (IATA)	: 859
	: 15kg
	: 863
	: 50kg : A3, A803
	: 8L
· /	
Inland waterway transport	
	: C8
	: 274
	: 1 kg
	: E2 : PP, EP
	: PP, EP : 0
Ramos of blue concongrito (ADIA)	. •

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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)		Т3
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).

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Chemicals Prohibition Ordinance (ChemVerbotsV) Hazardous Incident Ordinance (12. BImSchV)	 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). Is not subject to the Hazardous Incident Ordinance (12. BImSchV)
Netherlands	
SZW-lijst van kankerverwekkende stoffen 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 IMIDAZOLE is listed
Denmark	
MAL code Danish National Regulations	 : 00-3 (Executive Order No. 301 from 1993) : 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	
ΙΑΤΑ	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	

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Abbreviations and acronyms:	
OEL	Occupational Exposure Limit
РВТ	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.