

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 16/04/2015 Revision date: 20/03/2024 Supersedes version of: 19/12/2019 Version: 12.0

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

# 1.1. Product identifier

1.1. Product identifier	
Product form	: Substance
Substance name	: IMIDAZOLE
EC Index-No.	: 613-319-00-0
EC-No.	: 206-019-2
CAS-No.	: 288-32-4
Product code	: B2040
Product group	: End product
1.2. Relevant identified uses of t	he substance or mixture and uses advised against
1.2.1. Relevant identified uses	
Main use category	: Professional use
Use of the substance/mixture	: Laboratory chemicals
Function or use category	: Laboratory chemicals
1.2.2. Uses advised against	
No additional information available	
1.3. Details of the supplier of the	safety data sheet
Elemental Microanalysis Ltd	
1 Hameldown Road	
Okehampton, Devon, EX20 1UB	
GB United Kingdom	
T +44 1837 54446	
enquiries@microanalysis.co.uk, https://w	ww.elementalmicroanalysis.com/
1.4. Emergency telephone numb	ier
Emergency number	: +44 (0) 7990 767375
SECTION 2: Hazards ident	ification
	modion

# 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 H360D

## Adverse physicochemical, human health and environmental effects

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

## 2.2. Label elements

Labelling according to Regulation (EC) No. 127	2/2008 [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.

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Precautionary statements (CLP) :	P201 - Obtain special instructions before use.
	P280 - Wear eye protection, protective clothing, protective gloves.
	P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated
	clothing. Rinse skin with water/shower. Immediately call a POISON CENTER, a doctor.
	P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes.
	Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a
	POISON CENTER, a doctor.
	P308+P313 - IF exposed or concerned: Get medical advice/attention.
	P321 - Specific treatment (see supplemental first aid instruction on this label).

## 2.3. Other hazards

No additional information available

# SECTION 3: Composition/information on ingredients

# 3.1. Substances

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
IMIDAZOLE	CAS-No.: 288-32-4 EC-No.: 206-019-2 EC Index-No.: 613-319-00-0	100	Acute Tox. 4 (Oral), H302 (ATE=970 mg/kg bodyweight) Skin Corr. 1C, H314 Repr. 1B, H360D

# 3.2. Mixtures

Not applicable

SECTION 4: First aid measur	res
4.1. Description of first aid measure	95
First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. 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. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.
4.2. Most important symptoms and	effects, both acute and delayed
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

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

Treat symptomatically.

# 5.1. Extinguishing media

Suitable extinguishing media

: Water spray. Dry powder. Foam.

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5.2. Special hazards arising from the sub	ostance or mixture
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release m	easures
6.1. Personal precautions, protective equi	ipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: 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. For further information refer to section 8: "Exposure controls/personal protection".
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	nt and cleaning up
Methods for cleaning up	: Mechanically recover the product. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and s	storage
7.1. Precautions for safe handling	)
Precautions for safe handling	: Ensure good ventilation of the work station. 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 breathe dust/fume/gas/mist/vapours/spray.
Hygiene measures	: Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, i	ncluding any incompatibilities
Storage conditions	: Store locked up. Store in a well-ventilated place. Keep cool.

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

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## 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 symbol(s):



#### 8.2.2.1. Eye and face protection

Eye protection: Safety glasses

#### 8.2.2.2. Skin protection

**Skin and body protection:** Wear suitable protective clothing

Hand protection: Protective gloves

#### 8.2.2.3. Respiratory protection

#### Respiratory protection: [In case of inadequate ventilation] wear respiratory protection.

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.
Odour	: Characteristic odour.
Odour threshold	: Not available
Melting point	: 88-91
Freezing point	: Not applicable
Boiling point	: 256 °C
Flammability	: Non flammable.
Explosive limits	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: 145 °C
Auto-ignition temperature	: No data available.
Decomposition temperature	: Not available

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pH pH solution Viscosity, kinematic Solubility Partition coefficient n-octanol/water (Log Kow) Vapour pressure Vapour pressure at 50°C Density Relative density Relative vapour density at 20°C	<ul> <li>9-11 at 100g/L, 23°C</li> <li>Not available</li> <li>Not applicable</li> <li>Not available</li> <li>Not available</li> <li>Not available</li> <li>Not available</li> <li>Not available</li> <li>1.03</li> <li>0.003hPa at 25°C</li> </ul>
Particle size	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

# SECTION 10: Stability and reactivity

## 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

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

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11.1 Information on hazard classe	es as defined in Regulation (EC) No 1272/2008
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	: Harmful if swallowed. : Not classified : Not classified
IMIDAZOLE (288-32-4)	
LD50 oral rat	970 mg/kg
Skin corrosion/irritation	: Causes severe skin burns. pH: 9-11 at 100g/L, 23°C
Serious eye damage/irritation	: Assumed to cause serious eye damage pH: 9-11 at 100g/L, 23°C
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: May damage the unborn child.

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STOT-single exposure STOT-repeated exposure Aspiration hazard	<ul><li>Not classified</li><li>Not classified</li><li>Not classified</li></ul>	
IMIDAZOLE (288-32-4)		
Viscosity, kinematic	Not applicable	

# 11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - general : Hazardous to the aquatic environment, short-term : (acute) Hazardous to the aquatic environment, long-term : (chronic) Not rapidly degradable	Before neutralisation, the product may represent a danger to aquatic organisms. Not classified Not classified	
IMIDAZOLE (288-32-4)		
EC50 - Other aquatic organisms [1]	341.5 mg/l	
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. 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	
Waste treatment methods HP Code	<ul> <li>Dispose of contents/container in accordance with licensed collector's sorting instructions.</li> <li>HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.</li> <li>HP8 - "Corrosive:" waste which on application can cause skin corrosion.</li> </ul>

# **SECTION 14: Transport information**

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

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ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID n	umber			
UN 3263	UN 3263	UN 3263	UN 3263	UN 3263
14.2. UN proper shippin	g name			
CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (IMIDAZOLE)	CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (IMIDAZOLE)	Corrosive solid, basic, organic, n.o.s. (IMIDAZOLE)	CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (IMIDAZOLE)	CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (IMIDAZOLE)
Transport document descr	iption			
UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (IMIDAZOLE), 8, III, (E)	UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (IMIDAZOLE), 8, III	UN 3263 Corrosive solid, basic, organic, n.o.s. (IMIDAZOLE), 8, III	UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (IMIDAZOLE), 8, III	UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (IMIDAZOLE), 8, III
14.3. Transport hazard o	class(es)			
8	8	8	8	8
B	B	8	8	B
14.4. Packing group			I	
III	III	III	III	III
14.5. Environmental haz	ards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary informatio	n available		1	1

# 14.6. Special precautions for user

## **Overland transport**

Classification code (ADR)	:	C8
Special provisions (ADR)	:	274
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 instructions (ADR)	:	T1
Portable tank and bulk container special provisions	:	TP33
(ADR)		
Tank code (ADR)	:	SGAV, L4BN
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	3
Special provisions for carriage - Bulk (ADR)	:	VC1, VC2, AP7
Hazard identification number (Kemler No.)	:	80
Orange plates	:	80 3263
Tunnel restriction code (ADR)	:	E
EAC code	:	2X

# Transport by sea

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Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P002, LP02
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: T1
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: A
Segregation (IMDG)	: SGG18, SG35
Properties and observations (IMDG)	: Reacts violently with acids. Causes burns to skin, eyes and mucous membranes.
Air transport	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y845
PCA limited quantity max net quantity (IATA)	: 5kg
PCA packing instructions (IATA)	: 860
PCA max net quantity (IATA)	: 25kg
CAO packing instructions (IATA)	: 864
CAO max net quantity (IATA)	: 100kg
Special provisions (IATA)	: A3, A803
ERG code (IATA)	: 8L
Inland waterway transport	
Classification code (ADN)	: C8
Special provisions (ADN)	: 274
Limited quantities (ADN)	: 5 kg
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0
<b>č</b> ( <i>, ,</i>	
Rail transport	
Classification code (RID)	: C8
Special provisions (RID)	: 274
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 instructions (RID)	: T1
Portable tank and bulk container special provisions	: TP33
(RID)	
Tank codes for RID tanks (RID)	: SGAV, L4BN
Transport category (RID)	: 3
Special provisions for carriage – Bulk (RID)	: VC1, VC2, AP7
Colis express (express parcels) (RID)	
UUII3 EADIE33 (EADIE33 DAILEI3) (IND)	· ()=11
Hazard identification number (RID)	: CE11 : 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)**

Not listed on REACH Annex XVII

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## **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)

#### **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

No additional information available

## 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	

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Abbreviations and acronyms:		
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
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 disruptor	

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

The classification complies with

: ATP 12

Safety Data Sheet (SDS)\_EMAL, 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.