

# Safety Data Sheet

acc. to OSHA HCS

Printing date 02/04/2021

Reviewed on 08/11/2020

## 1 Identification

- **Product identifier**
- **Trade name:** *Imidazole Stock Solution*
- **Catalog or product number:** 10021782
- **Application of the substance / the mixture** *Laboratory chemicals*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
*Bio-Rad Laboratories, Life Science Group  
 2000 Alfred Nobel Drive  
 Hercules, California 94547* (510)741-1000
- **Information department:** *lsg\_techserv\_us@bio-rad.com*
- **Emergency telephone number:**  
*1(800)424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT.  
 510-741-1000*

## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
*Skin Irrit. 2 H315 Causes skin irritation.  
 Eye Irrit. 2A H319 Causes serious eye irritation.  
 Repr. 1B H360 May damage fertility or the unborn child.*

- **Label elements**
- **GHS label elements** *The product is classified and labeled according to the Globally Harmonized System (GHS).*
- **Hazard pictograms**



GHS07 GHS08

- **Signal word** *Danger*
- **Hazard-determining components of labeling:**  
*imidazole*
- **Hazard statements**  
*H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H360 May damage fertility or the unborn child.*
- **Precautionary statements**  
*P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P332+P313 If skin irritation occurs: Get medical advice/attention.  
 P362 Take off contaminated clothing.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*

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- **Classification system**
- **Special Hazards** Reproductive toxin.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with non-hazardous additions.

### · Listing of dangerous and non-hazardous components:

288-32-4	imidazole	Repr. 1B, H360 Skin Corr. 1C, H314 Acute Tox. 4, H302	1-2.5%
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- **Additional information** For the wording of the listed risk phrases refer to section 15.

## 4 First-aid measures

- **Description of first aid measures**
- **General information** Immediately remove any clothing soiled by the product.
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact**  
Generally the product does not irritate the skin.  
Immediately wash with water and soap and rinse thoroughly.  
Immediately rinse with water.
- **After eye contact** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing** Rinse mouth with water. Seek medical attention and appropriate follow-up.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **Environmental precautions:** Dilute with plenty of water.

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- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.
- **Reference to other sections**  
No dangerous substances are released.  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

imidazole	0.66 mg/m <sup>3</sup>
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· **PAC-2:**

288-32-4 imidazole	7.3 mg/m <sup>3</sup>
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· **PAC-3:**

288-32-4 imidazole	44 mg/m <sup>3</sup>
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## 7 Handling and storage

- **Handling**
- **Precautions for safe handling**  
No special measures required.  
Open and handle receptacle with care.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.

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- Store protective clothing separately.  
 Avoid contact with the eyes.  
 Avoid contact with the eyes and skin.
- **Breathing equipment:** Not necessary if room is well-ventilated. Adequate ventilation required.
  - **Protection of hands:** Protective gloves.
  - **Material of gloves:** Synthetic gloves
  - **Penetration time of glove material**  
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - **Eye protection:**  
 Safety glasses  
 Tightly sealed goggles.

## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · General Information

#### · Appearance:

Form:	Liquid
Color:	Colorless
Odor:	Odorless
Odor threshold:	Not determined.

· pH-value at 20 °C: 8

#### · Change in condition

Melting point/Melting range:	0 °C
Boiling point/Boiling range:	undetermined

· Flash point: Not applicable  
 Not determined.

· Flammability (solid, gaseous) Not applicable.

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Not determined.

#### · Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· Vapor pressure at 20 °C: 23 hPa

Density:	Not determined
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.

· Solubility in / Miscibility with  
 Water:

Fully miscible

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- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - dynamic:** Not determined.
  - kinematic:** Not determined.
- **Solvent content:**
  - Water:** 96.0 %
- **Solids content:** 100.0 %
- **Other information** No further relevant information available.

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
  - **on the skin:** Irritant to skin and mucous membranes.
  - **on the eye:** Irritant effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)**
  - None of the ingredients is listed.
- **NTP (National Toxicology Program)**
  - None of the ingredients is listed.
- **OSHA-Ca (Occupational Safety & Health Administration)**
  - None of the ingredients is listed.
- **Target organs:** Eye.

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## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.  
Dispose of waste in accordance to applicable national, regional, or local regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

- |                                       |                 |
|---------------------------------------|-----------------|
| · <b>UN-Number</b>                    |                 |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>    | Not Regulated   |
| · <b>UN proper shipping name</b>      |                 |
| · <b>DOT, ADN, IMDG, IATA</b>         | Not Regulated   |
| · <b>ADR</b>                          | Not Regulated   |
| · <b>Transport hazard class(es)</b>   |                 |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>    |                 |
| · <b>Class</b>                        | Not Regulated   |
| · <b>Packing group</b>                |                 |
| · <b>DOT, ADR, IMDG, IATA</b>         | Not Regulated   |
| · <b>Environmental hazards:</b>       |                 |
| · <b>Marine pollutant:</b>            | No              |
| · <b>Special precautions for user</b> | Not applicable. |

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- |  |                 |
|--|-----------------|
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | Not Regulated   |

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)**

- **Section 302/304 (40CFR355.30 / 40CFR355.40):**

None of the ingredients is listed.

- **Section 313 (40CFR372.65):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

7732-18-5	water	ACTIVE
7647-14-5	sodium chloride	ACTIVE
288-32-4	imidazole	ACTIVE
10049-21-5	Sodium Phosphate Monobasic, Monohydrate	ACTIVE

- **Hazardous Air Pollutants**

None of the ingredients is listed.

- **California Proposition 65:**

- **Chemicals known to cause cancer:**

The product does not contain listed components.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Developmental Toxicity**

None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **National regulations**

- **Water hazard class:** Generally not hazardous for water.

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- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Environmental Health and Safety.

- **Contact:**

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

- **Date of preparation / last revision** 02/04/2021 / -

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1C: Skin corrosion/irritation – Category 1C

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Repr. 1B: Reproductive toxicity – Category 1B

- **\* Data compared to the previous version altered.**