

Creation Date 04-Feb-2010

Revision Date 27-Jan-2024

Revision Number 3

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

|                           |                                           |
|---------------------------|-------------------------------------------|
| Product Description:      | <b>Imidazole, Molecular Biology Grade</b> |
| Cat No. :                 | <b>J67132</b>                             |
| Synonyms                  | Glyoxaline                                |
| Index No                  | 613-319-00-0                              |
| CAS No                    | 288-32-4                                  |
| EC No                     | 206-019-2                                 |
| Molecular Formula         | C3 H4 N2                                  |
| REACH registration number | -                                         |

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

|                                |                                                                                             |
|--------------------------------|---------------------------------------------------------------------------------------------|
| Recommended Use                | Laboratory chemicals.                                                                       |
| Sector of use                  | SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites    |
| Product category               | PC21 - Laboratory chemicals                                                                 |
| Process categories             | PROC15 - Use as a laboratory reagent                                                        |
| Environmental release category | ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates) |
| Uses advised against           | No Information available                                                                    |

### 1.3. Details of the supplier of the safety data sheet

|         |                                                                                                                                                                                                              |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Company | Avocado Research Chemicals Ltd.<br>(Part of Thermo Fisher Scientific)<br>Shore Road, Heysham<br>Lancashire, LA3 2XY,<br>United Kingdom<br>Office Tel: +44 (0) 1524 850506<br>Office Fax: +44 (0) 1524 850608 |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                |                                |
|----------------|--------------------------------|
| E-mail address | begel.sdsdesk@thermofisher.com |
|----------------|--------------------------------|

### 1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Physical hazards

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Based on available data, the classification criteria are not met

## Health hazards

Acute oral toxicity  
Skin Corrosion/Irritation  
Serious Eye Damage/Eye Irritation  
Reproductive Toxicity

Category 4 (H302)  
Category 1 C (H314)  
Category 1 (H318)  
Category 1B (H360D)

## Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

## 2.2. Label elements



Signal Word

Danger

## Hazard Statements

H302 - Harmful if swallowed  
H314 - Causes severe skin burns and eye damage  
H360D - May damage the unborn child  
May form combustible dust concentrations in air

## Precautionary Statements

P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P310 - Immediately call a POISON CENTER or doctor/physician  
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

## Additional EU labelling

Restricted to professional users

## 2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB)

May form explosible dust-air mixture if dispersed

This product does not contain any known or suspected endocrine disruptors

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

| Component   | CAS No   | EC No             | Weight % | CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567 |
|-------------|----------|-------------------|----------|-----------------------------------------------------------------------------------------|
| 1-Imidazole | 288-32-4 | EEC No. 206-019-2 | <=100    | Acute Tox. 4 (H302)                                                                     |

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|  |  |  |  |                                                               |
|--|--|--|--|---------------------------------------------------------------|
|  |  |  |  | Skin Corr. 1C (H314)<br>Eye Dam. 1 (H318)<br>Repr. 1B (H360D) |
|--|--|--|--|---------------------------------------------------------------|

|                           |   |
|---------------------------|---|
| REACH registration number | - |
|---------------------------|---|

Full text of Hazard Statements: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

|                                    |                                                                                                                                                                                                                                                                                                                         |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eye Contact                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.                                                                                                                                                                                       |
| Skin Contact                       | Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.                                                                                                                                                                                                             |
| Ingestion                          | Do NOT induce vomiting. Call a physician or poison control center immediately.                                                                                                                                                                                                                                          |
| Inhalation                         | Remove to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. |
| Self-Protection of the First Aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.                                                                                                                                                                        |

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

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

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

|                    |                        |
|--------------------|------------------------|
| Notes to Physician | Treat symptomatically. |
|--------------------|------------------------|

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### Suitable Extinguishing Media

Water spray. Alcohol resistant foam. Dry chemical, soda ash, lime or sand.

#### Extinguishing media which must not be used for safety reasons

No information available.

### 5.2. Special hazards arising from the substance or mixture

Corrosive material. Fine dust dispersed in air may ignite. Dust can form an explosive mixture with air. Thermal decomposition can lead to release of irritating gases and vapors.

#### Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>), Hydrogen cyanide (hydrocyanic acid), Ammonia.

### 5.3. Advice for firefighters

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As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid dust formation.

### 6.2. Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

### 6.3. Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance. Avoid dust formation.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

**Technical Rules for Hazardous Substances (TRGS) 510**      Class 6.1C  
**Storage Class (LGK) (Germany)**

### 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### **Exposure limits**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

#### **Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

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## Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

| Component                        | Acute effects local (Dermal) | Acute effects systemic (Dermal) | Chronic effects local (Dermal) | Chronic effects systemic (Dermal) |
|----------------------------------|------------------------------|---------------------------------|--------------------------------|-----------------------------------|
| 1-Imidazole<br>288-32-4 ( ≤100 ) |                              |                                 |                                | DNEL = 1.5mg/kg<br>bw/day         |

| Component                        | Acute effects local (Inhalation) | Acute effects systemic (Inhalation) | Chronic effects local (Inhalation) | Chronic effects systemic (Inhalation) |
|----------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------------------|
| 1-Imidazole<br>288-32-4 ( ≤100 ) |                                  |                                     |                                    | DNEL = 10.6mg/m <sup>3</sup>          |

## Predicted No Effect Concentration (PNEC)

See values below.

| Component                        | Fresh water     | Fresh water sediment                | Water Intermittent | Microorganisms in sewage treatment | Soil (Agriculture)               |
|----------------------------------|-----------------|-------------------------------------|--------------------|------------------------------------|----------------------------------|
| 1-Imidazole<br>288-32-4 ( ≤100 ) | PNEC = 0.13mg/L | PNEC =<br>0.336mg/kg<br>sediment dw | PNEC = 1.3mg/L     | PNEC = 10mg/L                      | PNEC =<br>0.0425mg/kg soil<br>dw |

| Component                        | Marine water     | Marine water sediment                | Marine water intermittent | Food chain | Air |
|----------------------------------|------------------|--------------------------------------|---------------------------|------------|-----|
| 1-Imidazole<br>288-32-4 ( ≤100 ) | PNEC = 0.013mg/L | PNEC =<br>0.0336mg/kg<br>sediment dw |                           |            |     |

## 8.2. Exposure controls

### Engineering Measures

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

### Personal protective equipment

#### Eye Protection

Goggles (European standard - EN 166)

#### Hand Protection

Protective gloves

| Glove material                                      | Breakthrough time                    | Glove thickness | EU standard | Glove comments        |
|-----------------------------------------------------|--------------------------------------|-----------------|-------------|-----------------------|
| Natural rubber<br>Nitrile rubber<br>Neoprene<br>PVC | See manufacturers<br>recommendations | -               | EN 374      | (minimum requirement) |

#### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

#### Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

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and maintained properly

|                                        |                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Large scale/emergency use</b>       | Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced<br><b>Recommended Filter type:</b> Particulates filter conforming to EN 143                                                                                             |
| <b>Small scale/Laboratory use</b>      | Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.<br><b>Recommended half mask:-</b> Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141<br>When RPE is used a face piece Fit Test should be conducted |
| <b>Environmental exposure controls</b> | No information available.                                                                                                                                                                                                                                                                                                   |

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

|                                                |                               |                                          |
|------------------------------------------------|-------------------------------|------------------------------------------|
| <b>Physical State</b>                          | Solid                         |                                          |
| <b>Appearance</b>                              | White - Yellow                |                                          |
| <b>Odor</b>                                    | Amine compounds               |                                          |
| <b>Odor Threshold</b>                          | No data available             |                                          |
| <b>Melting Point/Range</b>                     | 86 - 90 °C / 186.8 - 194 °F   |                                          |
| <b>Softening Point</b>                         | No data available             |                                          |
| <b>Boiling Point/Range</b>                     | 255 - 256 °C / 491 - 492.8 °F | @ 760 mmHg                               |
| <b>Flammability (liquid)</b>                   | Not applicable                | Solid                                    |
| <b>Flammability (solid,gas)</b>                | No information available      |                                          |
| <b>Explosion Limits</b>                        | No data available             |                                          |
| <b>Flash Point</b>                             | 145 °C / 293 °F               | <b>Method -</b> No information available |
| <b>Autoignition Temperature</b>                | 480 °C / 896 °F               |                                          |
| <b>Decomposition Temperature</b>               | No data available             |                                          |
| <b>pH</b>                                      | 10.5                          | (6.7% aq.sol.)                           |
| <b>Viscosity</b>                               | Not applicable                | Solid                                    |
| <b>Water Solubility</b>                        | Soluble                       |                                          |
| <b>Solubility in other solvents</b>            | No information available      |                                          |
| <b>Partition Coefficient (n-octanol/water)</b> |                               |                                          |
| <b>Component</b>                               | <b>log Pow</b>                |                                          |
| 1-Imidazole                                    | -0.02                         |                                          |
| <b>Vapor Pressure</b>                          | 0.003 mbar @ 20 °C            |                                          |
| <b>Density / Specific Gravity</b>              | No data available             |                                          |
| <b>Bulk Density</b>                            | No data available             |                                          |
| <b>Vapor Density</b>                           | Not applicable                | Solid                                    |
| <b>Particle characteristics</b>                | No data available             |                                          |

### 9.2. Other information

|                          |                        |
|--------------------------|------------------------|
| <b>Molecular Formula</b> | C3 H4 N2               |
| <b>Molecular Weight</b>  | 68.08                  |
| <b>Evaporation Rate</b>  | Not applicable - Solid |

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

None known, based on information available

### 10.2. Chemical stability

Stable under recommended storage conditions.

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## 10.3. Possibility of hazardous reactions

### Hazardous Polymerization Hazardous Reactions

Hazardous polymerization does not occur.  
None under normal processing.

## 10.4. Conditions to avoid

Avoid dust formation. Incompatible products. Excess heat. Exposure to air or moisture over prolonged periods.

## 10.5. Incompatible materials

Strong oxidizing agents. Acids. Acid chlorides. Acid anhydrides.

## 10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>). Hydrogen cyanide (hydrocyanic acid). Ammonia.

## SECTION 11: TOXICOLOGICAL INFORMATION

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

#### Product Information

##### (a) acute toxicity;

Oral

Category 4

Dermal

Based on available data, the classification criteria are not met

Inhalation

Based on available data, the classification criteria are not met

| Component   | LD50 Oral       | LD50 Dermal | LC50 Inhalation |
|-------------|-----------------|-------------|-----------------|
| 1-Imidazole | 970 mg/kg (Rat) | -           | -               |

##### (b) skin corrosion/irritation;

Category 1 C

##### (c) serious eye damage/irritation;

Category 1

##### (d) respiratory or skin sensitization;

Respiratory

Based on available data, the classification criteria are not met

Skin

Based on available data, the classification criteria are not met

##### (e) germ cell mutagenicity;

Based on available data, the classification criteria are not met

Not mutagenic in AMES Test

##### (f) carcinogenicity;

Based on available data, the classification criteria are not met

There are no known carcinogenic chemicals in this product

##### (g) reproductive toxicity;

Reproductive Effects

Category 1B

May cause harm to the unborn child.

##### (h) STOT-single exposure;

Based on available data, the classification criteria are not met

##### (i) STOT-repeated exposure;

Target Organs

Based on available data, the classification criteria are not met

None known.

##### (j) aspiration hazard;

Not applicable

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Solid

## Other Adverse Effects

See actual entry in RTECS for complete information The toxicological properties have not been fully investigated.

## Symptoms / effects, both acute and delayed

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

## 11.2. Information on other hazards

## Endocrine Disrupting Properties

Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### Ecotoxicity effects

Do not empty into drains.

| Component   | Freshwater Fish | Water Flea                                 | Freshwater Algae                                                                                        |
|-------------|-----------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 1-Imidazole |                 | EC50: = 341.5 mg/L, 48h<br>(Daphnia magna) | EC50: = 82 mg/L, 96h<br>(Desmodesmus subspicatus)<br>EC50: = 130 mg/L, 72h<br>(Desmodesmus subspicatus) |

| Component   | Microtox                                                                                         | M-Factor |
|-------------|--------------------------------------------------------------------------------------------------|----------|
| 1-Imidazole | = 1200 mg/L EC50 Pseudomonas putida 17 h<br>= 231 mg/L EC50 Photobacterium phosphoreum<br>30 min |          |

### 12.2. Persistence and degradability

#### Persistence

Readily biodegradable  
Soluble in water, Persistence is unlikely, based on information available.

### 12.3. Bioaccumulative potential

Bioaccumulation is unlikely

| Component   | log Pow | Bioconcentration factor (BCF) |
|-------------|---------|-------------------------------|
| 1-Imidazole | -0.02   | No data available             |

### 12.4. Mobility in soil

The product is water soluble, and may spread in water systems. Will likely be mobile in the environment due to its water solubility. Highly mobile in soils

### 12.5. Results of PBT and vPvB assessment

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB).

### 12.6. Endocrine disrupting properties

#### Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

### 12.7. Other adverse effects

#### Persistent Organic Pollutant Ozone Depletion Potential

This product does not contain any known or suspected substance  
This product does not contain any known or suspected substance

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

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|                                            |                                                                                                                                                                                                               |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Waste from Residues/Unused Products</b> | Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.                                        |
| <b>Contaminated Packaging</b>              | Dispose of this container to hazardous or special waste collection point.                                                                                                                                     |
| <b>European Waste Catalogue (EWC)</b>      | According to the European Waste Catalog, Waste Codes are not product specific, but application specific.                                                                                                      |
| <b>Other Information</b>                   | Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not flush to sewer. Large amounts will affect pH and harm aquatic organisms. |

## SECTION 14: TRANSPORT INFORMATION

### IMDG/IMO

|                                                                 |                                                      |
|-----------------------------------------------------------------|------------------------------------------------------|
| <b>14.1. UN number</b>                                          | UN3263                                               |
| <b>14.2. UN proper shipping name</b><br>Technical Shipping Name | Corrosive solid, basic, organic, n.o.s.<br>Imidazole |
| <b>14.3. Transport hazard class(es)</b>                         | 8                                                    |
| <b>14.4. Packing group</b>                                      | III                                                  |

### ADR

|                                                                 |                                                      |
|-----------------------------------------------------------------|------------------------------------------------------|
| <b>14.1. UN number</b>                                          | UN3263                                               |
| <b>14.2. UN proper shipping name</b><br>Technical Shipping Name | Corrosive solid, basic, organic, n.o.s.<br>Imidazole |
| <b>14.3. Transport hazard class(es)</b>                         | 8                                                    |
| <b>14.4. Packing group</b>                                      | III                                                  |

### IATA

|                                                                 |                                                      |
|-----------------------------------------------------------------|------------------------------------------------------|
| <b>14.1. UN number</b>                                          | UN3263                                               |
| <b>14.2. UN proper shipping name</b><br>Technical Shipping Name | Corrosive solid, basic, organic, n.o.s.<br>Imidazole |
| <b>14.3. Transport hazard class(es)</b>                         | 8                                                    |
| <b>14.4. Packing group</b>                                      | III                                                  |

|                                                                      |                                  |
|----------------------------------------------------------------------|----------------------------------|
| <b>14.5. Environmental hazards</b>                                   | No hazards identified            |
| <b>14.6. Special precautions for user</b>                            | No special precautions required. |
| <b>14.7. Maritime transport in bulk according to IMO instruments</b> | Not applicable, packaged goods   |

## SECTION 15: REGULATORY INFORMATION

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

#### International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component   | CAS No   | EINECS    | ELINCS | NLP | IECSC | TCSI | KECL     | ENCS | ISHL |
|-------------|----------|-----------|--------|-----|-------|------|----------|------|------|
| 1-Imidazole | 288-32-4 | 206-019-2 | -      | -   | X     | X    | KE-20937 | X    | X    |

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| Component   | CAS No   | TSCA | TSCA Inventory notification - Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|-------------|----------|------|-----------------------------------------------|-----|------|------|-------|-------|
| 1-Imidazole | 288-32-4 | X    | ACTIVE                                        | X   | -    | X    | X     | X     |

Legend: X - Listed '-' - Not Listed

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

## Authorisation/Restrictions according to EU REACH

| Component   | CAS No   | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances                                                            | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|-------------|----------|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 1-Imidazole | 288-32-4 | -                                                                   | Use restricted. See item 30.<br>(see link for restriction details)<br>Use restricted. See item 75.<br>(see link for restriction details) | -                                                                                                     |

## REACH links

<https://echa.europa.eu/substances-restricted-under-reach>

## Seveso III Directive (2012/18/EC)

| Component   | CAS No   | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|-------------|----------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| 1-Imidazole | 288-32-4 | Not applicable                                                                            | Not applicable                                                                           |

## Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

## Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

Take note of Directive 94/33/EC on the protection of young people at work

Take note of Dir 92/85/EC on the protection of pregnant and breastfeeding women at work

## National Regulations

**UK** - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

## WGK Classification

See table for values

| Component   | Germany - Water Classification (AwSV) | Germany - TA-Luft Class |
|-------------|---------------------------------------|-------------------------|
| 1-Imidazole | WGK2                                  |                         |

## 15.2. Chemical safety assessment

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A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

## SECTION 16: OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed  
H314 - Causes severe skin burns and eye damage  
H318 - Causes serious eye damage  
H360D - May damage the unborn child

### Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer  
Predicted No Effect Concentration (PNEC)

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

### **Key literature references and sources for data**

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**ATE** - Acute Toxicity Estimate

**VOC** - (Volatile Organic Compound)

### **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

### **Prepared By**

Health, Safety and Environmental Department

### **Creation Date**

04-Feb-2010

### **Revision Date**

27-Jan-2024

### **Revision Summary**

New emergency telephone response service provider.

**This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.**

### **Disclaimer**

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**End of Safety Data Sheet**