# EPO-TEK® H72 PART A

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 4/21/2022 Version: 1.0

## SECTION 1: Identification

### 1.1. Identification

Product form : Mixture
Product name : EPO-TEK® H72 PART A

### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : adhesives
Recommended use : adhesives
Restrictions on use : Not to be used for any purpose other than the one the product was designed for

### 1.3. Supplier

Epoxy Technology, Inc.
14 Fortune Drive
Billerica, MA, 01821
USA
T 978-667-3805
www.epotek.com

### 1.4. Emergency telephone number

Emergency number : ChemTel: +1 (800) 255-3924, +1 (813) 248-0585

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

**GHS US classification**

| | | |
|---|---|---|
| Acute toxicity (dermal) Category 4 | H312 | Harmful in contact with skin |
| Skin corrosion/irritation Category 2 | H315 | Causes skin irritation |
| Serious eye damage/eye irritation Category 2 | H319 | Causes serious eye irritation |
| Skin sensitization, Category 1 | H317 | May cause an allergic skin reaction |
| Germ cell mutagenicity Category 2 | H341 | Suspected of causing genetic defects |
| Carcinogenicity Category 1B | H350 | May cause cancer |
| Hazardous to the aquatic environment – Acute Hazard Category 3 | H402 | Harmful to aquatic life |
| Hazardous to the aquatic environment – Chronic Hazard Category 3 | H412 | Harmful to aquatic life with long lasting effects |

Full text of H statements : see section 16

### 2.2. GHS Label elements, including precautionary statements

**GHS US labeling**

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger
Hazard statements (GHS US) : H312 - Harmful in contact with skin
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H341 - Suspected of causing genetic defects
H350 - May cause cancer
H402 - Harmful to aquatic life

| | | |
|---|---|---|
| Precautionary statements (GHS US) | : | H412 - Harmful to aquatic life with long lasting effects<br>P201 - Obtain special instructions before use.<br>P202 - Do not handle until all safety precautions have been read and understood.<br>P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.<br>P264 - Wash hands, forearms and face thoroughly after handling.<br>P272 - Contaminated work clothing must not be allowed out of the workplace.<br>P273 - Avoid release to the environment.<br>P280 - Wear protective gloves/protective clothing/eye protection/face protection.<br>P302+P352 - If on skin: Wash with plenty of water.<br>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P308+P313 - If exposed or concerned: Get medical advice/attention.<br>P312 - Call a poison center or doctor if you feel unwell.<br>P321 - Specific treatment (see supplemental first aid instruction on this label).<br>P322 - Specific treatment (see supplemental first aid instruction on this label)<br>P332+P313 - If skin irritation occurs: Get medical advice/attention.<br>P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.<br>P337+P313 - If eye irritation persists: Get medical advice/attention.<br>P362+P364 - Take off contaminated clothing and wash it before reuse.<br>P363 - Wash contaminated clothing before reuse.<br>P405 - Store locked up.<br>P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. |

### 2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : Harmful dust may be released during cutting, milling or grinding process.

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name | Product identifier | % | GHS US classification |
|---|---|---|---|
| Resorcinal diglycidyl ether | CAS-No.: 101-90-6 | 10 – 30 | Acute Tox. 4 (Oral), H302<br>Acute Tox. 3 (Dermal), H311<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317<br>Muta. 2, H341<br>Carc. 1B, H350<br>Aquatic Chronic 3, H412 |
| Bisphenol A diglycidyl ether resin* | CAS-No.: Trade Secret | 1 – 10 | Skin Irrit. 2, H315<br>Eye Irrit. 2A, H319<br>Skin Sens. 1, H317<br>Aquatic Acute 2, H401<br>Aquatic Chronic 2, H411 |
| Epoxy resin* | CAS-No.: Trade Secret | 1 – 5 | Eye Irrit. 2, H319<br>Skin Sens. 1, H317 |

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Comments : Components not listed are either non-hazardous or are below reportable limits.

Full text of hazard classes and H-statements : see section 16

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Special protective equipment and precautions for fire-fighters

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

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. Avoid breathing dust/fume/gas/mist/vapors/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 and cleaning up

For containment : Collect spillage.

| | | |
|---|---|---|
| Methods for cleaning up | : | Take up liquid spill into absorbent material. 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 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. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not get in eyes, on skin, or on clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. |
| Hygiene measures | : | Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

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

| | | |
|---|---|---|
| Storage conditions | : | Store locked up. Store in a well-ventilated place. Keep cool. |

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**EPO-TEK® H72 PART A**

No additional information available

**Epoxy resin**

**USA - ACGIH - Occupational Exposure Limits**

| | |
|---|---|
| ACGIH OEL TWA | 3 mg/m³ (Respirable fraction) |

**Bisphenol A diglycidyl ether resin**

No additional information available

**Resorcinal diglycidyl ether (101-90-6)**

No additional information available

### 8.2. Appropriate engineering controls

| | | |
|---|---|---|
| Appropriate engineering controls | : | Ensure good ventilation of the work station. |
| Environmental exposure controls | : | Avoid release to the environment. |

### 8.3. Individual protection measures/Personal protective equipment

**Hand protection:**

Wear suitable gloves resistant to chemical penetration. Neoprene or nitrile rubber gloves. Butyl-rubber protective gloves. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Refer to manufacturer's information. Gloves must be replaced after each use and whenever signs of wear or perforation appear

| **Eye protection:** |
|---|
| Safety glasses |

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

| **Respiratory protection:** |
|---|
| Wear respiratory protection. |

**Personal protective equipment symbol(s):**



## SECTION 9: Physical and chemical properties

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

| | | |
|---|---|---|
| Physical state | : | Liquid |
| Color | : | Gray |
| Odor | : | Mild odor |
| Odor threshold | : | No data available |
| pH | : | No data available |
| Melting point | : | Not applicable |
| Freezing point | : | No data available |
| Boiling point | : | No data available |
| Flash point | : | No data available |
| Relative evaporation rate (butyl acetate=1) | : | No data available |
| Flammability (solid, gas) | : | Not applicable. |
| Vapor pressure | : | No data available |
| Relative vapor density at 20 °C | : | No data available |
| Relative density | : | No data available |
| Solubility | : | No data available |
| Partition coefficient n-octanol/water (Log Pow) | : | No data available |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity, kinematic | : | No data available |
| Viscosity, dynamic | : | No data available |
| Explosion limits | : | No data available |
| Explosive properties | : | No data available |
| Oxidizing properties | : | No data available |

### 9.2. Other information

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.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Harmful in contact with skin.
Acute toxicity (inhalation) : Not classified

| EPO-TEK® H72 PART A | |
|---|---|
| ATE US (dermal) | 1367.413 mg/kg body weight |

| Bisphenol A diglycidyl ether resin | |
|---|---|
| LD50 dermal rat | > 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)) |

| Resorcinal diglycidyl ether (101-90-6) | |
|---|---|
| LD50 oral rat | 2570 mg/kg Source: HSDB |
| ATE US (oral) | 500 mg/kg body weight |
| ATE US (dermal) | 300 mg/kg body weight |

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : May cause an allergic skin reaction.
Germ cell mutagenicity : Suspected of causing genetic defects.
Carcinogenicity : May cause cancer.

| Bisphenol A diglycidyl ether resin | |
|---|---|
| NOAEL (chronic,oral,animal/male,2 years) | 15 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information) |
| NOAEL (chronic,oral,animal/female,2 years) | 100 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information) |

| Resorcinal diglycidyl ether (101-90-6) | |
|---|---|
| IARC group | 2B - Possibly carcinogenic to humans |

| Resorcinal diglycidyl ether (101-90-6) | |
|---|---|
| National Toxicity Program (NTP) Status | Reasonably anticipated to be Human Carcinogen |

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

| Bisphenol A diglycidyl ether resin | |
|---|---|
| NOAEL (oral,rat,90 days) | 50 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: other:japanese MITI guidelines for toxicity testing of chemicals |

Aspiration hazard : Not classified
Viscosity, kinematic : No data available
Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Eye irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

| Bisphenol A diglycidyl ether resin | |
|---|---|
| LOEC (chronic) | 1 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |
| NOEC (chronic) | 0.3 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |

### 12.2. Persistence and degradability

| Epoxy resin | |
|---|---|
| Persistence and degradability | Biodegradability in water: no data available. |

| Bisphenol A diglycidyl ether resin | |
|---|---|
| Persistence and degradability | Not readily biodegradable in water. |

| Resorcinal diglycidyl ether (101-90-6) | |
|---|---|
| Persistence and degradability | Not readily biodegradable in water. |

### 12.3. Bioaccumulative potential

| Epoxy resin | |
|---|---|
| Bioaccumulative potential | No bioaccumulation data available. |

| Bisphenol A diglycidyl ether resin | |
|---|---|
| BCF - Other aquatic organisms [1] | 31 (Estimated value, Fresh weight) |
| Partition coefficient n-octanol/water (Log Pow) | 3 (Estimated value, 25 °C) |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). |

| Resorcinal diglycidyl ether (101-90-6) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 1.15 Source: chemicalbook |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |

### 12.4. Mobility in soil

| Bisphenol A diglycidyl ether resin | |
|---|---|
| Surface tension | 59 mN/m (20 °C, 0.09 g/l) |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 2.65 (log Koc, SRC PCKOCWIN v2.0, QSAR) |
| Ecology - soil | Low potential for adsorption in soil. |

| Resorcinal diglycidyl ether (101-90-6) | |
|---|---|
| Surface tension | 63.9 mN/m (20 °C, 0.1 %, EU Method A.5: Surface tension) |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 1.65 (log Koc, EU Method C.19, Experimental value) |
| Ecology - soil | Highly mobile in soil. |

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

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

## SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

### 14.1. UN number

Not regulated for transport

### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable
Proper Shipping Name (TDG) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

### 14.3. Transport hazard class(es)

**DOT**
Transport hazard class(es) (DOT) : Not applicable

**TDG**
Transport hazard class(es) (TDG) : Not applicable

**IMDG**
Transport hazard class(es) (IMDG) : Not applicable

**IATA**
Transport hazard class(es) (IATA) : Not applicable

### 14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (TDG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Special precautions for user

**DOT**
No data available

**TDG**
Emergency Response Guide (ERG) Number : 171

**IMDG**
No data available

**IATA**
No data available

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

| | | |
|---|---|---|
| Resorcinal diglycidyl ether | CAS-No. 101-90-6 | 10 – 30% |

### 15.2. International regulations

**CANADA**

**Epoxy resin**

Listed on the Canadian DSL (Domestic Substances List)

**Bisphenol A diglycidyl ether resin**

Listed on the Canadian DSL (Domestic Substances List)

**Resorcinal diglycidyl ether (101-90-6)**

Listed on the Canadian DSL (Domestic Substances List)

**EU-Regulations**

No additional information available

### National regulations

| Resorcinal diglycidyl ether (101-90-6) |
|---|
| Listed on IARC (International Agency for Research on Cancer)<br>Listed as carcinogen on NTP (National Toxicology Program)<br>Listed on INSQ (Mexican National Inventory of Chemical Substances) |

### 15.3. US State regulations

⚠ **WARNING:** This product can expose you to Resorcinal diglycidyl ether, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

| Component | State or local regulations |
|---|---|
| Resorcinal diglycidyl ether(101-90-6) | U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List |

## SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| **Full text of H-phrases** | |
|---|---|
| H302 | Harmful if swallowed |
| H311 | Toxic in contact with skin |
| H312 | Harmful in contact with skin |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation |
| H341 | Suspected of causing genetic defects |
| H350 | May cause cancer |
| H401 | Toxic to aquatic life |
| H402 | Harmful to aquatic life |
| H411 | Toxic to aquatic life with long lasting effects |
| H412 | Harmful to aquatic life with long lasting effects |

Safety Data Sheet (SDS), USA

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.

# EPO-TEK® H72 PART B

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)
Issue date: 4/21/2022 Revision date: 7/30/2026 Supersedes: 8/28/2023 Version: 3.0

## SECTION 1 Identification

### 1.1. Product identifier

| | | |
|---|---|---|
| Product form | : | Mixture |
| Product name | : | EPO-TEK® H72 PART B |
| Product code | : | EPO-TEK® H72 PART B |

### 1.2. Other means of identification

No additional information available

### 1.3. Recommended use of the chemical and restrictions on use

| | | |
|---|---|---|
| Use of the substance/mixture | : | Adhesives |
| Recommended use | : | Adhesives |
| Restrictions on use | : | Not to be used for any purpose other than the one the product was designed for |

### 1.4. Supplier's details

Epoxy Technology, Inc.
14 Fortune Drive
Billerica, MA 01821
USA
T 978-667-3805 - F 978-663-9782
www.epotek.com

### 1.5. Emergency phone number

| | | |
|---|---|---|
| Emergency number | : | VelocityEHS: +1 (800) 255-3924, +1 (813) 248-0585 |

## SECTION 2 Hazard Identification

### 2.1. Classification of the substance or mixture

#### GHS US classification

| | | |
|---|---|---|
| Acute toxicity (oral), Category 4 | H302 | Harmful if swallowed. |
| Skin corrosion/irritation, Category 1B | H314 | Causes severe skin burns and eye damage. |
| Serious eye damage/eye irritation, Category 1 | H318 | Causes serious eye damage. |
| Skin sensitization, Category 1 | H317 | May cause an allergic skin reaction. |
| Carcinogenicity, Category 2 | H351 | Suspected of causing cancer. |
| Reproductive toxicity, Category 1B | H360 | May damage fertility or the unborn child. |
| Specific target organ toxicity — Repeated exposure, Category 2 | H373 | May cause damage to organs through prolonged or repeated exposure. |

Full text of H statements : see section 16

### 2.2. Label elements

#### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger

Hazard statements (GHS US) : H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction

| | | |
|---|---|---|
| | | H351 - Suspected of causing cancer.<br>H360 - May damage fertility or the unborn child<br>H373 - May cause damage to organs through prolonged or repeated exposure |
| Precautionary statements (GHS US) | : | P201 - Obtain special instructions before use.<br>P202 - Do not handle until all safety precautions have been read and understood.<br>P260 - Do not breathe dusts or mists.<br>P264 - Wash hands, forearms and face thoroughly after handling.<br>P270 - Do not eat, drink or smoke when using this product.<br>P272 - Contaminated work clothing must not be allowed out of the workplace.<br>P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.<br>P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.<br>P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.<br>P302+P352 - If on skin: Wash with plenty of water.<br>P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.<br>P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.<br>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P308+P313 - If exposed or concerned: Get medical advice/attention.<br>P310 - Immediately call a poison center or doctor.<br>P314 - Get medical advice or attention if you feel unwell.<br>P321 - Specific treatment (see supplemental first aid instruction on this label).<br>P330 - Rinse mouth.<br>P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.<br>P362+P364 - Take off contaminated clothing and wash it before reuse.<br>P363 - Take off immediately all contaminated clothing and wash it before reuse.<br>P405 - Store locked up.<br>P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations. |

### 2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

### 2.4. Hazards not otherwise classified

Other hazards which do not result in classification : Harmful dust may be released during cutting, milling or grinding process.

### 2.5. Unknown acute toxicity

No additional information available

## SECTION 3 Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name | Product identifier | % | GHS US classification |
|---|---|---|---|
| Substituted imidazole | CAS-No.: 931-36-2 | 30 - 60* | Acute Tox. 4 (Oral), H302<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Skin Sens. 1B, H317 |

| Name | Product identifier | % | GHS US classification |
|---|---|---|---|
| Imidazole | CAS-No.: 288-32-4 | 30 - 60* | Acute Tox. 4 (Oral), H302<br>Skin Corr. 1C, H314<br>Eye Dam. 1, H318<br>Repr. 1B, H360 |
| Substituted imidazole | CAS-No.: 822-36-6 | 3 - 10* | Acute Tox. 4 (Oral), H302<br>Acute Tox. 3 (Dermal), H311<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Carc. 2, H351 |
| Reaction mass of 2-ethyl-4-methyl-1H-imidazole-1-propiononitrile and 2-ethyl-5-methyl-1H-imidazole-1-propiononitrile | CAS-No.: 568591-00-4 | 3 - 7* | Acute Tox. 4 (Oral), H302<br>Eye Irrit. 2, H319<br>STOT RE 2, H373<br>Aquatic Acute 3, H402<br>Aquatic Chronic 3, H412 |
| Substituted Imidazole | CAS-No.: 616-47-7 | 0.5 - 5* | Acute Tox. 4 (Oral), H302<br>Acute Tox. 4 (Dermal), H312<br>Skin Corr. 1B, H314 |

Comments : Components not listed are either non-hazardous or are below reportable limits.

Full text of hazard classes and H-statements : see section 16

## SECTION 4 First aid measures

### 4.1. Description of necessary first-aid measures

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. Remove/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.

Personal protection for first-aid responders. : First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects after inhalation : None under normal conditions.

Symptoms/effects after skin contact : Burns. May cause an allergic skin reaction.

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

Symptoms/effects after ingestion : Harmful if swallowed. Burns.

Chronic symptoms : May damage fertility or the unborn child.

### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Specific hazards arising from the chemical

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

### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6 Accidental release measures

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

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

#### For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapors/spray.

#### 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".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

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

### 6.2. Methods and materials for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13.

## SECTION 7 Handling and 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. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.
Hygiene measures : Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

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

Technical measures : Keep in a cool, well-ventilated place away from heat.
Storage conditions : Store locked up.

Packaging materials : Always store product in container of same material as original container.

## SECTION 8 Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures, such as personal protective equipment

**Personal protective equipment:**

Wear recommended personal protective equipment.

| **Hand protection:** |
|---|
| Wear suitable gloves resistant to chemical penetration. Neoprene or nitrile rubber gloves. Butyl-rubber protective gloves. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Refer to manufacturer's information. Gloves must be replaced after each use and whenever signs of wear or perforation appear |

| **Eye protection:** |
|---|
| Safety glasses |

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

| **Respiratory protection:** |
|---|
| [In case of inadequate ventilation] wear respiratory protection. |

**Personal protective equipment symbol(s):**



## SECTION 9 Physical and chemical properties

### 9.1. Basic physical and chemical properties

| | | |
|---|---|---|
| Physical state | : | Liquid |
| Color | : | Gray |
| Odor | : | Mild odor |
| Odor threshold | : | No data available |
| pH | : | No data available |
| Melting point | : | Not applicable |
| Freezing point | : | No data available |
| Boiling point | : | No data available |
| Flash point | : | No data available |
| Flammability (solid, gas) | : | Not applicable. |
| Vapor pressure | : | No data available |
| Relative vapor density at 20°C | : | No data available |
| Relative density | : | No data available |
| Solubility | : | No data available |
| Partition coefficient n-octanol/water (Log Pow) | : | No data available |

| | | |
|---|---|---|
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity, kinematic | : | No data available |
| Explosion limits | : | No data available |
| Particle characteristics | : | No data available |

### 9.2. Data relevant with regard to physical hazard classes (supplemental)

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.

## SECTION 11 Toxicological information

### 11.1. Information on toxicological effects

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

| EPO-TEK® H72 PART B | |
|---|---|
| ATE US (oral) | 621.905 mg/kg body weight |

| Reaction mass of 2-ethyl-4-methyl-1H-imidazole-1-propiononitrile and 2-ethyl-5-methyl-1H-imidazole-1-propiononitrile (568591-00-4) | |
|---|---|
| LD50 oral rat | 300 – 2000 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method) |
| ATE US (oral) | 1150 mg/kg body weight |

| Substituted Imidazole (616-47-7) | |
|---|---|
| LD50 oral rat | ≈ 1144 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other: |
| LD50 dermal rabbit | 400 – 640 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) |

| Substituted Imidazole (616-47-7) | |
|---|---|
| ATE US (oral) | 500 mg/kg body weight |
| ATE US (dermal) | 400 mg/kg body weight |

| Substituted imidazole (822-36-6) | |
|---|---|
| LD50 oral rat | 350 mg/kg Source: IUCLID |
| LD50 oral | 173 mg/kg |
| LD50 dermal rabbit | 440 mg/kg Source: IUCLID |
| ATE US (oral) | 173 mg/kg body weight |
| ATE US (dermal) | 440 mg/kg body weight |

| Substituted imidazole (931-36-2) | |
|---|---|
| LD50 oral rat | 731 mg/kg (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral) |
| LD50 dermal rabbit | > 400 mg/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal) |
| LC50 Inhalation - Rat | > 0.03 mg/l (Equivalent or similar to OECD 403, 8 h, Rat, Male / female, Experimental value, (maximum achievable concentration), Inhalation (vapours)) |
| ATE US (oral) | 731 mg/kg body weight |

| Imidazole (288-32-4) | |
|---|---|
| LD50 oral rat | 970 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral, 7 day(s)) |
| LD50 oral | 960 mg/kg |
| ATE US (oral) | 960 mg/kg body weight |

Skin corrosion/irritation : Causes severe skin burns.

| Substituted Imidazole (616-47-7) | |
|---|---|
| pH | 11.3 (10 %) |

| Substituted imidazole (822-36-6) | |
|---|---|
| pH | 10.6 (10 %) |

| Substituted imidazole (931-36-2) | |
|---|---|
| pH | 10.9 (21 %) |

| Imidazole (288-32-4) | |
|---|---|
| pH | 10.5 (7 %) |

Serious eye damage/irritation : Causes serious eye damage.

| Substituted Imidazole (616-47-7) | |
|---|---|
| pH | 11.3 (10 %) |

| Substituted imidazole (822-36-6) | |
|---|---|
| pH | 10.6 (10 %) |

| Substituted imidazole (931-36-2) | |
|---|---|
| pH | 10.9 (21 %) |

| Imidazole (288-32-4) | |
|---|---|
| pH | 10.5 (7 %) |

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer.

| Substituted imidazole (822-36-6) | |
|---|---|
| IARC group | 2B - Possibly carcinogenic to humans |

Reproductive toxicity : May damage fertility or the unborn child.

STOT-single exposure : Not classified

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

| Reaction mass of 2-ethyl-4-methyl-1H-imidazole-1-propiononitrile and 2-ethyl-5-methyl-1H-imidazole-1-propiononitrile (568591-00-4) | |
|---|---|
| NOAEL (oral,rat,90 days) | 50 mg/kg body weight Animal: rat, Guideline: other:, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents) |
| STOT-repeated exposure | May cause damage to organs through prolonged or repeated exposure. |

| Substituted Imidazole (616-47-7) | |
|---|---|
| NOAEL (oral,rat,90 days) | 90 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents) |

| Substituted imidazole (931-36-2) | |
|---|---|
| NOAEL (oral,rat,90 days) | 150 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:EPA OPPTS 870.3650 (Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test) |

| Imidazole (288-32-4) | |
|---|---|
| NOAEL (oral,rat,90 days) | 60 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |

Aspiration hazard : Not classified

| Substituted imidazole (822-36-6) | |
|---|---|
| Viscosity, kinematic | Not applicable (solid) |
| **Substituted imidazole (931-36-2)** | |
| Viscosity, kinematic | 1435.897 mm²/s |
| **Imidazole (288-32-4)** | |
| Viscosity, kinematic | No data available in the literature |

Symptoms/effects after inhalation : None under normal conditions.

Symptoms/effects after skin contact : Burns. May cause an allergic skin reaction.

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

Symptoms/effects after ingestion : Harmful if swallowed. Burns.

Chronic symptoms : May damage fertility or the unborn child.

## SECTION 12 Ecological information

### 12.1. Ecotoxicity

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

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

| Reaction mass of 2-ethyl-4-methyl-1H-imidazole-1-propiononitrile and 2-ethyl-5-methyl-1H-imidazole-1-propiononitrile (568591-00-4) | |
|---|---|
| EC50 - Crustacea [1] | 99.9 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | 65 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |
| EC50 72h - Algae [2] | 34.1 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |

| Substituted Imidazole (616-47-7) | |
|---|---|
| LC50 - Fish [1] | 100 – 215 mg/l Test organisms (species): Leuciscus idus |
| EC50 - Crustacea [1] | 267.94 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | 180 mg/l (Algae) |
| EC50 96h - Algae [1] | 12.637 mg/l Source: Ecological Structure Activity Relationships |

| Substituted imidazole (822-36-6) | |
|---|---|
| LC50 - Fish [1] | 0.34 mg/l Source: IUCLID |
| EC50 - Crustacea [1] | 180 mg/l Source: IUCLID |
| EC50 72h - Algae [1] | 2 mg/l Source: IUCLID |

| Substituted imidazole (931-36-2) | |
|---|---|
| LC50 - Fish [1] | 68.1 mg/l (DIN 38412-15, 96 h, Leuciscus idus, Static system, Fresh water, Experimental value) |
| EC50 - Crustacea [1] | 297.3 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value) |
| EC50 72h - Algae [1] | 124.8 mg/l (DIN 38412-9, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate) |
| EC50 72h - Algae [2] | 72 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |
| EC50 96h - Algae [1] | 6.057 mg/l Source: Ecological Structure Activity Relationships |

| Imidazole (288-32-4) | |
|---|---|
| LC50 - Fish [1] | 283.6 mg/l (48 h, Leuciscus idus, Static system, Fresh water, Experimental value, Nominal concentration) |
| EC50 - Crustacea [1] | 341.5 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect) |
| EC50 72h - Algae [1] | 133 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |
| ErC50 algae | 133 mg/l (DIN 38412: German standard methods for the examination of water, waste water and sludge, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration) |
| NOEC chronic algae | 25 mg/l |

## 12.2. Persistence and degradability

| EPO-TEK® H72 PART B | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Reaction mass of 2-ethyl-4-methyl-1H-imidazole-1-propiononitrile and 2-ethyl-5-methyl-1H-imidazole-1-propiononitrile (568591-00-4) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Substituted Imidazole (616-47-7) | |
|---|---|
| Persistence and degradability | Not readily biodegradable in water. |

| Substituted imidazole (822-36-6) | |
|---|---|
| Persistence and degradability | Inherently biodegradable, Not readily biodegradable in water. |
| Biochemical oxygen demand (BOD) | 0.000002 g $O_2$ /g substance |
| Chemical oxygen demand (COD) | 0.0015 g $O_2$ /g substance |

| Substituted imidazole (931-36-2) | |
|---|---|
| Persistence and degradability | Readily biodegradable in water. |

| Imidazole (288-32-4) | |
|---|---|
| Persistence and degradability | Readily biodegradable in the soil, Readily biodegradable in water. |

## 12.3. Bioaccumulative potential

| Substituted Imidazole (616-47-7) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | -0.06 Source: ChemIDplus |

| Substituted imidazole (822-36-6) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 0.23 (Literature) |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |

| Substituted imidazole (931-36-2) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 1.13 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C) |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |

| Imidazole (288-32-4) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | -0.02 (Weight of evidence approach, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C) |
| Bioaccumulative potential | Not bioaccumulative. |

## 12.4. Mobility in soil

| Substituted Imidazole (616-47-7) | |
|---|---|
| Mobility in soil | 15.75 Source: Quantitative Structure Activity Relation |

| Substituted imidazole (822-36-6) | |
|---|---|
| Mobility in soil | 28.23 Source: EPI SUITE |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 1.5 (log Koc, SRC PCKOCWIN v2.0, Calculated value) |

| Substituted imidazole (822-36-6) | |
|---|---|
| Ecology - soil | Highly mobile in soil. |

| Substituted imidazole (931-36-2) | |
|---|---|
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 3.71 (log Koc, Calculated value, pH = 7) |
| Ecology - soil | Low potential for mobility in soil. |

| Imidazole (288-32-4) | |
|---|---|
| Surface tension | No data available in the literature |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 1.36 – 2.32 (log Koc, Calculated value) |
| Ecology - soil | Low potential for adsorption in soil. |

### 12.5. Other adverse effects

Ozone : Not classified

Fluorinated greenhouse gases : No

## SECTION 13 Disposal considerations

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

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

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

Product/Packaging disposal recommendations : Disposal must be done according to official regulations.

Additional information : Do not re-use empty containers.

Ecological waste information : The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.

## SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

| DOT | TDG | IMDG | IATA |
|---|---|---|---|
| **14.1. UN number** | | | |
| UN3267 | UN3267 | 3267 | 3267 |
| **14.2. Proper Shipping Name** | | | |
| Corrosive liquid, basic, organic, n.o.s. (Imidazole) | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Imidazole) | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Imidazole) | Corrosive liquid, basic, organic, n.o.s. (Imidazole) |
| **14.3. Transport hazard class(es)** | | | |
| 8 | 8 | 8 | 8 |
|   |   |   |   |
| **14.4. Packing group** | | | |
| III | III | III | III |

| DOT | TDG | IMDG | IATA |
|---|---|---|---|
| **14.5. Environmental hazards** | | | |
| Dangerous for the environment: No | Dangerous for the environment: No | Dangerous for the environment: No<br>Marine pollutant: No | Dangerous for the environment: No |
| No supplementary information available | | | |

## 14.6. Transport in bulk

Not applicable

## 14.7. Special precautions for user

**DOT**

| | | |
|---|---|---|
| UN-No. (DOT) | : | UN3267 |
| DOT Special Provisions (49 CFR 172.102) | : | IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).<br>T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)<br>TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.<br>TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP. |
| DOT Packaging Exceptions (49 CFR 173.xxx) | : | 154 |
| DOT Packaging Non Bulk (49 CFR 173.xxx) | : | 203 |
| DOT Packaging Bulk (49 CFR 173.xxx) | : | 241 |
| DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) | : | 5 L |
| DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) | : | 60 L |
| DOT Vessel Stowage Location | : | A - The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel. |
| DOT Vessel Stowage Other | : | 40 - Stow ‘‘clear of living quarters’’,52 - Stow ‘‘separated from’’ acids |

**TDG**

| | | |
|---|---|---|
| UN-No. (TDG) | : | UN3267 |

| | | |
|---|---|---|
| TDG Special Provisions | : | 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the danger or dangers posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3).<br>(2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name:<br>(a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S;<br>(b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S;<br>(c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S;<br>(d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or<br>(e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S.<br>(3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment:<br>(a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or<br>(b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS. |
| Explosive Limit and Limited Quantity Index | : | 5 L |
| Excepted quantities (TDG) | : | E1 |
| Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index | : | 5 L |
| Emergency Response Guide (ERG) Number | : | 153 |

### IMDG

| | | |
|---|---|---|
| Special provision (IMDG) | : | 223, 274 |
| Limited quantities (IMDG) | : | 5 L |
| Excepted quantities (IMDG) | : | E1 |
| Packing instructions (IMDG) | : | P001, LP01 |
| IBC packing instructions (IMDG) | : | IBC03 |
| Tank instructions (IMDG) | : | T7 |
| Tank special provisions (IMDG) | : | TP1, TP28 |
| EmS-No. (Fire) | : | F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE |
| EmS-No. (Spillage) | : | S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES |
| Stowage category (IMDG) | : | A |
| Stowage and handling (IMDG) | : | SW2 |
| Segregation (IMDG) | : | SGG18, SG35 |
| Properties and observations (IMDG) | : | Reacts violently with acids. Causes burns to skin, eyes and mucous membranes. |

### IATA

| | | |
|---|---|---|
| Special provision (IATA) | : | A3, A803 |
| PCA Excepted quantities (IATA) | : | E1 |
| PCA Limited quantities (IATA) | : | Y841 |
| PCA limited quantity max net quantity (IATA) | : | 1L |
| PCA packing instructions (IATA) | : | 852 |
| PCA max net quantity (IATA) | : | 5L |
| CAO packing instructions (IATA) | : | 856 |
| CAO max net quantity (IATA) | : | 60L |
| ERG code (IATA) | : | 8L |

## SECTION 15 Regulatory information

### 15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

| | | |
|---|---|---|
| Reaction mass of 2-ethyl-4-methyl-1H-imidazole-1-propiononitrile and 2-ethyl-5-methyl-1H-imidazole-1-propiononitrile | CAS-No. 568591-00-4 | 3 - 7*% |

## 15.2. International regulations

### CANADA

**Substituted Imidazole (616-47-7)**

Listed on the Canadian DSL (Domestic Substances List)

**Substituted imidazole (822-36-6)**

Listed on the Canadian NDSL (Non-Domestic Substances List)

**Substituted imidazole (931-36-2)**

Listed on the Canadian DSL (Domestic Substances List)

**Imidazole (288-32-4)**

Listed on the Canadian DSL (Domestic Substances List)

### EU-Regulations

No additional information available

### National regulations

**Substituted Imidazole (616-47-7)**

Listed on INSQ (Mexican National Inventory of Chemical Substances)

**Substituted imidazole (822-36-6)**

Listed on IARC (International Agency for Research on Cancer)

**Imidazole (288-32-4)**

Listed on INSQ (Mexican National Inventory of Chemical Substances)

## 15.3. State regulations

**WARNING:** This product can expose you to 4-Methylimidazole, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

## SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

Revision date : 7/30/2026

Issue date : 4/21/2022

| Full text of hazard classes and H-statements | |
|---|---|
| H302 | Harmful if swallowed |
| H311 | Toxic in contact with skin |
| H312 | Harmful in contact with skin |

| Full text of hazard classes and H-statements | |
|---|---|
| H314 | Causes severe skin burns and eye damage |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H318 | Causes serious eye damage |
| H319 | Causes serious eye irritation |
| H351 | Suspected of causing cancer. |
| H360 | May damage fertility or the unborn child |
| H373 | May cause damage to organs through prolonged or repeated exposure |
| H402 | Harmful to aquatic life |
| H412 | Harmful to aquatic life with long lasting effects |

Safety Data Sheet (SDS), USA

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.