

**Pemetrexed for Injection, USP**  
**Safety Data Sheet**  
**SDS-000052**

Strengths: 100mg per vial, 500mg per vial

**Pemetrexed for Injection, USP**  
**Safety Data Sheet**  
**SDS-000075**

Strengths: 750mg per vial, 1g per vial



Meitheal Pharmaceuticals, Inc.

Safety Data Sheet

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## Section 1. Identification

**GHS product identifier** : Pemetrexed for Injection

**Other means of identification** : Not available.

**Product type** : Powder.

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

**Product use** : Pharmaceuticals (For intended use only.)  
Observe technical data sheet/instructions for use.  
Specific Treatments: Antimetabolite.

**Area of application** : Professional applications.

**Supplier's details** : Meitheal Pharmaceuticals, Inc.  
8700 W. Bryn Mawr, Suite 600S  
Chicago, IL 60631

Telephone: 224-443-4617  
www.meithealpharma.com

**e-mail address of person responsible for this SDS** : info@meithealpharma.com

**Emergency telephone number (with hours of operation)** : 844-824-8426 (Monday - Friday, 08:00 - 18:00 CST)

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : COMBUSTIBLE DUSTS

### GHS label elements

**Signal word** : Warning

**Hazard statements** : May form combustible dust concentrations in air.

### Precautionary statements

**Prevention** : Not applicable.

**Response** : Not applicable.

**Storage** : Not applicable.

**Disposal** : Not applicable.

**Supplemental label elements** : Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.



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## Section 2. Hazards identification

- Hazards not otherwise classified** : None known.
- Hazards identified when used** : No known significant effects or critical hazards.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Substance
- Other means of identification** : Not available.

### CAS number/other identifiers

**CAS number** : 357166-30-4

| Ingredient name   | Synonyms | %          | Identifiers      |
|---|----------|------------|------------------|
| Sodium (2S)-2-({4-[2-(2-amino-4-oxo-4,7-dihydro-1H-pyrrolo[2,3-d]pyrimidin-5-yl)ethyl]benzoyl}amino)pentanedioate (2S)-2-({4-[2-(2-amino-4-oxo-4,7-dihydro-3H-pyrrolo[2,3-d]pyrimidin-5-yl)ethyl]benzoyl }amino)pentanedioate hydrate (4:1:1:5) | -        | ≥95 - ≤105 | CAS: 357166-30-4 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.

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

#### Potential acute health effects

- Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.



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## Section 4. First aid measures

- Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
irritation  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use dry chemical powder.
- Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : May form explosible dust-air mixture if dispersed.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
metal oxide/oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.



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## Section 5. Fire-fighting measures

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.



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## Section 7. Handling and storage

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

| <b>Ingredient name</b>  | <b>Exposure limits</b> |
|---|------------------------|
| Sodium (2S)-2-({4-[2-(2-amino-4-oxo-4,7-dihydro-1H-pyrrolo[2,3-d]pyrimidin-5-yl)ethyl]benzoyl}amino)pentanedioate (2S)-2-({4-[2-(2-amino-4-oxo-4,7-dihydro-3H-pyrrolo[2,3-d]pyrimidin-5-yl)ethyl]benzoyl }amino)pentanedioate hydrate (4:1:1:5) | None.                  |

#### Biological exposure indices

None known.

**Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.



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## Section 8. Exposure controls/personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced, use dust goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

- Physical state** : Solid. [Powder.]
- Color** : White or Off-white.
- Odor** : Odorless.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point or initial boiling point and boiling range** : Not available.
- Flash point** : Not applicable.
- Evaporation rate** : Not available.
- Flammability** : Not available.
- Lower and upper explosion limit/flammability limit** : Not applicable.
- Vapor pressure** : Not available.
- Relative vapor density** : Not applicable.

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## Section 9. Physical and chemical properties

**Relative density** : Not available.

**Density** : Not available.

**Solubility(ies)** :

| Media | Result         |
|-------|----------------|
| water | Easily soluble |

**Miscible with water** : Yes.

**Partition coefficient: n-octanol/water** : Not applicable.

**Auto-ignition temperature** : Not applicable.

**Decomposition temperature** : Not available.

**SADT** : Not available.

**Viscosity** : Dynamic (room temperature): Not available.  
Kinematic (room temperature): Not available.  
Kinematic (40°C (104°F)): Not available.

### Particle characteristics

**Median particle size** : Not available.

### Other information

**Physical/chemical properties comments** : No additional information.

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.  
Under normal conditions of storage and use, hazardous polymerization will not occur.

**Conditions to avoid** : Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.

**Incompatible materials** : Reactive or incompatible with the following materials:  
oxidizing materials

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



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## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

**Conclusion/Summary [Product]** : Not available.

#### Skin corrosion/irritation

**Conclusion/Summary [Product]** : Not available.

#### Serious eye damage/eye irritation

**Conclusion/Summary [Product]** : Not available.

#### Respiratory corrosion/irritation

**Conclusion/Summary [Product]** : Not available.

#### Respiratory or skin sensitization

#### **Skin**

**Conclusion/Summary [Product]** : Not available.

#### **Respiratory**

**Conclusion/Summary [Product]** : Not available.

#### Germ cell mutagenicity

**Conclusion/Summary [Product]** : Not available.

#### Carcinogenicity

**Conclusion/Summary [Product]** : Not available.

#### Reproductive toxicity

**Conclusion/Summary [Product]** : Not available.



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## Section 11. Toxicological information

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

### Information on the likely routes of exposure

Not available.

### Potential acute health effects

- Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
- Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
irritation  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### **Short term exposure**

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### **Long term exposure**

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.



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## Section 11. Toxicological information

### Potential chronic health effects

**Conclusion/Summary [Product]** : Not available.

- General** : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

N/A

## Section 12. Ecological information

### Toxicity

**Conclusion/Summary [Product]** : Not available.

### Persistence and degradability

**Conclusion/Summary [Product]** : Not available.

### Bioaccumulative potential

Not available.

### Mobility in soil

**Soil/Water partition coefficient** : Not available.

### Other adverse effects

No known significant effects or critical hazards.



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## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                                   | DOT Classification | IMDG           | IATA           |
|-----------------------------------|--------------------|----------------|----------------|
| <b>UN number</b>                  | Not regulated.     | Not regulated. | Not regulated. |
| <b>UN proper shipping name</b>    | -                  | -              | -              |
| <b>Transport hazard class(es)</b> | -                  | -              | -              |
| <b>Packing group</b>              | -                  | -              | -              |
| <b>Environmental hazards</b>      | No.                | No.            | No.            |

### Additional information

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments** : Not available.



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## Section 15. Regulatory information

**U.S. Federal regulations** : TSCA 8(a) CDR Exempt/Partial exemption: Not determined  
 United States inventory (TSCA 8b): Not determined.

**TSCA 12(b) - Chemical export notification**

Not applicable.

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**

**Composition/information on ingredients**

No products were found.

**SARA 304 RQ** : Not applicable

**SARA 311/312**

**Classification** : COMBUSTIBLE DUSTS

**Composition/information on ingredients**

| Name   | %          | Classification    |
|--|------------|-------------------|
| Sodium (2S)-2-({4-[2-(2-amino-4-oxo-4,7-dihydro-1H-pyrrolo[2,3-d]pyrimidin-5-yl)ethyl]benzoyl}amino)pentanedioate (2S)-2-({4-[2-(2-amino-4-oxo-4,7-dihydro-3H-pyrrolo[2,3-d]pyrimidin-5-yl)ethyl]benzoyl}amino)pentanedioate hydrate (4:1:1:5) | ≥95 - ≤105 | COMBUSTIBLE DUSTS |

**SARA 313**

Not applicable.

**State regulations**

**Massachusetts** : None of the components are listed.

**New York** : None of the components are listed.

**New Jersey** : None of the components are listed.

**Pennsylvania** : None of the components are listed.



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## Section 15. Regulatory information

### California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

|                  |   |   |
|------------------|---|---|
| Health           | / | 0 |
| Flammability     |   | 3 |
| Physical hazards |   | 0 |

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

### National Fire Protection Association (U.S.A.)



### Procedure used to derive the classification

| Classification    | Justification         |
|-------------------|-----------------------|
| COMBUSTIBLE DUSTS | On basis of test data |

### History

: 05/28/2025



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## Section 16. Other information

**Date of issue/Date of revision**

**Date of previous issue** : 05/26/2023

**Version** : 3.0

**Prepared by** : Sphera Solutions

**Key to abbreviations**

- : ATE = Acute Toxicity Estimate
- : BCF = Bioconcentration Factor
- : GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- : IATA = International Air Transport Association
- : IBC = Intermediate Bulk Container
- : IMDG = International Maritime Dangerous Goods
- : IMO = International Maritime Organization
- : LogPow = logarithm of the octanol/water partition coefficient
- : MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- : N/A = Not available
- : SGG = Segregation Group
- : TDG = Transportation of Dangerous Goods
- : UN = United Nations

**References**

- : HCS (U.S.A.)- Hazard Communication Standard
- : International transport regulations

**Indicates information that has changed from previously issued version.**

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



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## Section 1. Identification

- GHS product identifier** : Pemetrexed for Injection, USP (750mg & 1g)  
**Other means of identification** : 750mg and 1g  
**Product type** : Powder.

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

- Product use** : Pharmaceuticals (For intended use only.)  
Observe technical data sheet/instructions for use.  
Specific Treatments: Antimetabolite.

- Area of application** : Professional applications.

- Supplier's details** : Meitheal Pharmaceuticals, Inc.  
8700 W. Bryn Mawr, Suite 600S  
Chicago, IL 60631

Telephone: 224-443-4617  
www.meithealpharma.com

- e-mail address of person responsible for this SDS** : info@meithealpharma.com

- Emergency telephone number (with hours of operation)** : 844-824-8426 (Monday - Friday, 08:00 - 18:00 CST)

## Section 2. Hazards identification

- OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

- Classification of the substance or mixture** :
- |      |   |
|------|---|
| H315 | COMBUSTIBLE DUSTS   |
| H341 | SKIN IRRITATION - Category 2                                    |
| H360 | GERM CELL MUTAGENICITY - Category 2                             |
| H372 | TOXIC TO REPRODUCTION - Category 1A                             |
|      | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 |

### GHS label elements

**Hazard pictograms** :



- Signal word** : Danger



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## Section 2. Hazards identification

**Hazard statements** : H315 - Causes skin irritation.  
 H341 - Suspected of causing genetic defects.  
 H360 - May damage fertility or the unborn child.  
 H372 - Causes damage to organs through prolonged or repeated exposure. (blood)  
 May form combustible dust concentrations in air.

**Precautionary statements**

**Prevention** : P201 - Obtain special instructions before use.  
 P202 - Do not handle until all safety precautions have been read and understood.  
 P280 - Wear protective gloves, protective clothing and eye or face protection.  
 P260 - Do not breathe dust or mist.  
 P270 - Do not eat, drink or smoke when using this product.  
 P264 - Wash thoroughly after handling

**Response** : P308 + P313 - IF exposed or concerned: Get medical advice or attention.  
 P302 + P352 - IF ON SKIN: Wash with plenty of water.  
 P332 + P313 - If skin irritation occurs: Get medical advice or attention.  
 P362 + P364 - Take off contaminated clothing and wash it before reuse.

**Storage** : P405 - Store locked up.

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements** : Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.

**Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : 750mg and 1g

| Ingredient name  | Other names | %         | Identifiers      |
|--|-------------|-----------|------------------|
| disodium (2S)-2-[(4-[2-(2-amino-4-oxo-4,7-dihydro-3H-pyrrolo[2,3-d]pyrimidin-5-yl)ethyl]phenyl)carbonyl]amino]pentanedioate heptahydrate | -           | ≥50 - ≤75 | CAS: 357166-29-1 |
| D-mannitol   | Mannitol    | ≥25 - ≤50 | CAS: 69-65-8     |
| sodium hydroxide   | -           | ≤0.1      | CAS: 1310-73-2   |
| Hydrochloric acid  | -           | ≤0.1      | CAS: 7647-01-0   |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**



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## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

#### Potential acute health effects

- Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
- Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
- Skin contact** : Causes skin irritation.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations



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## Section 4. First aid measures

- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use dry chemical powder.
- Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : May form explosible dust-air mixture if dispersed.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
metal oxide/oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.



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## Section 5. Fire-fighting measures

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during



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## Section 7. Handling and storage

transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

### Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

| Ingredient name   | Exposure limits   |
|---|---|
| disodium (2S)-2-[(4-[2-(2-amino-4-oxo-4,7-dihydro-3H-pyrrolo [2,3-d]pyrimidin-5-yl)ethyl]phenyl)carbonyl)amino]pentanedioate heptahydrate | None.   |
| D-mannitol  | None.   |
| sodium hydroxide  | <b>ACGIH TLV (United States, 1/2024)</b><br>C: 2 mg/m <sup>3</sup> .<br><b>NIOSH REL (United States, 10/2020)</b><br>CEIL: 2 mg/m <sup>3</sup> .<br><b>OSHA PEL (United States, 5/2018)</b><br>TWA 8 hours: 2 mg/m <sup>3</sup> .<br><b>CAL OSHA PEL (United States, 5/2018)</b><br>C: 2 mg/m <sup>3</sup> .  |
| Hydrochloric acid   | <b>ACGIH TLV (United States, 1/2024) A4.</b><br>C: 2 ppm.<br><b>NIOSH REL (United States, 10/2020)</b><br>CEIL: 5 ppm.<br>CEIL: 7 mg/m <sup>3</sup> .<br><b>OSHA PEL (United States, 5/2018)</b><br>CEIL: 5 ppm.<br>CEIL: 7 mg/m <sup>3</sup> .<br><b>CAL OSHA PEL (United States, 5/2018)</b><br>C: 2 ppm.<br>TWA 8 hours: 0.45 mg/m <sup>3</sup> .<br>TWA 8 hours: 0.3 ppm. |



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## Section 8. Exposure controls/personal protection

- Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
  - Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
  - Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. If operating conditions cause high dust concentrations to be produced, use dust goggles.
  - Skin protection**
    - Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
    - Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
    - Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
  - Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.



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## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

|   |  |
|---|--|
| <b>Physical state</b>   | : Solid. [Powder.]   |
| <b>Color</b>  | : White to light yellow or green-yellow.   |
| <b>Odor</b>   | : Not available.   |
| <b>Odor threshold</b>   | : Not available.   |
| <b>pH</b>   | : 6.6 to 7.8 [Conc. (% w/w): 2.5%] [Reconstitution solution]   |
| <b>Melting point</b>  | : Not available.   |
| <b>Boiling point or initial boiling point and boiling range</b> | : Not available.   |
| <b>Flash point</b>  | : Not applicable.  |
| <b>Evaporation rate</b>   | : Not available.   |
| <b>Flammability</b>   | : Not available.   |
| <b>Lower and upper explosion limit/flammability limit</b>       | : Not applicable.  |
| <b>Vapor pressure</b>   | : Not available.   |
| <b>Relative vapor density</b>                                   | : Not applicable.  |
| <b>Relative density</b>   | : Not available.   |
| <b>Density</b>  | : Not available.   |
| <b>Solubility(ies)</b>  | : Not available.   |
| <b>Partition coefficient: n-octanol/water</b>                   | : Not applicable.  |
| <b>Auto-ignition temperature</b>                                | : Not applicable.  |
| <b>Decomposition temperature</b>                                | : Not available.   |
| <b>SADT</b>   | : Not available.   |
| <b>Viscosity</b>  | : Dynamic (room temperature): Not available.<br>Kinematic (room temperature): Not available.<br>Kinematic (40°C (104°F)): Not available. |
| <b>Flow time (ISO 2431)</b>                                     | : Not available.   |
| <b>Particle characteristics</b>                                 |  |
| <b>Median particle size</b>                                     | : Not available.   |
| <b>Other information</b>  |  |
| <b>Physical/chemical properties comments</b>                    | : No additional information.   |



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## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.  
 Under normal conditions of storage and use, hazardous polymerization will not occur.
- Conditions to avoid** : Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.
- Incompatible materials** : Reactive or incompatible with the following materials:  
 oxidizing materials
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name | Result    | Species | Dose        | Exposure |
|-------------------------|-----------|---------|-------------|----------|
| D-mannitol              | LD50 Oral | Rat     | 13500 mg/kg | -        |

#### Irritation/Corrosion

| Product/ingredient name | Result                 | Species | Score | Exposure         | Observation |
|-------------------------|------------------------|---------|-------|------------------|-------------|
| sodium hydroxide        | Eyes - Mild irritant   | Rabbit  | -     | 400 ug           | -           |
|                         | Eyes - Severe irritant | Rabbit  | -     | 1 %              | -           |
|                         | Eyes - Severe irritant | Rabbit  | -     | 0.5 minutes 1 mg | -           |
|                         | Eyes - Severe irritant | Rabbit  | -     | 24 hours 50 ug   | -           |
|                         | Skin - Severe irritant | Rabbit  | -     | 24 hours 500 mg  | -           |
| Hydrochloric acid       | Eyes - Mild irritant   | Rabbit  | -     | 0.5 minutes 5 mg | -           |

#### Sensitization

Not available.



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## Section 11. Toxicological information

### Mutagenicity

**Conclusion/Summary** : Not available.

### Carcinogenicity

**Conclusion/Summary** : Not available.

### Classification

| Product/ingredient name | OSHA | IARC | NTP |
|-------------------------|------|------|-----|
| Hydrochloric acid       | -    | 3    | -   |

### Reproductive toxicity

**Conclusion/Summary** : Not available.

### Teratogenicity

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

| Name              | Category   | Route of exposure | Target organs                |
|-------------------|------------|-------------------|------------------------------|
| sodium hydroxide  | Category 3 | -                 | Respiratory tract irritation |
| Hydrochloric acid | Category 3 | -                 | Respiratory tract irritation |

### Specific target organ toxicity (repeated exposure)

| Name  | Category   | Route of exposure | Target organs |
|---|------------|-------------------|---------------|
| disodium (2S)-2-[[{4-[2-(2-amino-4-oxo-4,7-dihydro-3H-pyrrolo[2,3-d]pyrimidin-5-yl)ethyl]phenyl}carbonyl)amino]pentanedioate heptahydrate | Category 1 | -                 | blood         |

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

### Potential acute health effects

**Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

**Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

**Skin contact** : Causes skin irritation.

**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics



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## Section 11. Toxicological information

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Potential chronic health effects

- General** : Causes damage to organs through prolonged or repeated exposure. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : Suspected of causing genetic defects.
- Reproductive toxicity** : May damage fertility or the unborn child.

### Numerical measures of toxicity

#### Acute toxicity estimates



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## Section 11. Toxicological information

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|-------------------------|--------------|----------------|--------------------------|----------------------------|-------------------------------------|
| D-mannitol              | 13500        | N/A            | N/A                      | N/A                        | N/A                                 |

## Section 12. Ecological information

### Toxicity

| Product/ingredient name | Result                            | Species   | Exposure |
|-------------------------|-----------------------------------|---|----------|
| sodium hydroxide        | Acute EC50 40.38 mg/l Fresh water | Crustaceans - <i>Ceriodaphnia dubia</i> - Neonate | 48 hours |
| Hydrochloric acid       | Acute LC50 125 ppm Fresh water    | Fish - <i>Gambusia affinis</i> - Adult            | 96 hours |
|                         | Acute LC50 240 mg/l Marine water  | Crustaceans - <i>Carcinus maenas</i> - Adult      | 48 hours |
|                         | Acute LC50 282 ppm Fresh water    | Fish - <i>Gambusia affinis</i> - Adult            | 96 hours |

**Conclusion/Summary** : Not available.

### Persistence and degradability

Not available.

### Bioaccumulative potential

| Product/ingredient name | LogP <sub>ow</sub> | BCF | Potential |
|-------------------------|--------------------|-----|-----------|
| D-mannitol              | -3.1               | -   | Low       |

### Mobility in soil

**Soil/Water partition coefficient** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered



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### Section 13. Disposal considerations

when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

### Section 14. Transport information

|                                   | DOT Classification | IMDG           | IATA           |
|-----------------------------------|--------------------|----------------|----------------|
| <b>UN number</b>                  | Not regulated.     | Not regulated. | Not regulated. |
| <b>UN proper shipping name</b>    | -                  | -              | -              |
| <b>Transport hazard class(es)</b> | -                  | -              | -              |
| <b>Packing group</b>              | -                  | -              | -              |
| <b>Environmental hazards</b>      | No.                | No.            | No.            |

**Additional information**

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments** : Not available.

### Section 15. Regulatory information

- U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** Not determined.  
**Clean Water Act (CWA) 311:** sodium hydroxide; Hydrochloric acid
- Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed
- Clean Air Act Section 602 Class I Substances** : Not listed
- Clean Air Act Section 602 Class II Substances** : Not listed



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## Section 15. Regulatory information

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**

**Composition/information on ingredients**

| Name              | %    | EHS  | SARA 302 TPQ |           | SARA 304 RQ |           |
|-------------------|------|------|--------------|-----------|-------------|-----------|
|                   |      |      | (lbs)        | (gallons) | (lbs)       | (gallons) |
| Hydrochloric acid | ≤0.1 | Yes. | 500          | -         | 5000        | -         |

**SARA 304 RQ** : 5555555.6 lbs / 2522222.2 kg

**SARA 311/312**

**Classification** : COMBUSTIBLE DUSTS  
 SKIN IRRITATION - Category 2  
 GERM CELL MUTAGENICITY - Category 2  
 TOXIC TO REPRODUCTION - Category 1A  
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

**Composition/information on ingredients**

| Name   | %         | Classification   |
|--|-----------|--|
| disodium (2S)-2-[(4-[2-(2-amino-4-oxo-4,7-dihydro-3H-pyrrolo [2,3-d]pyrimidin-5-yl)ethyl]phenyl)carbonyl]amino]pentanedioate heptahydrate sodium hydroxide | ≥50 - ≤75 | SKIN IRRITATION - Category 2<br>GERM CELL MUTAGENICITY - Category 2<br>TOXIC TO REPRODUCTION - Category 1A<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1  |
|  | ≤0.1      | CORROSIVE TO METALS - Category 1<br>SKIN CORROSION - Category 1A<br>SERIOUS EYE DAMAGE - Category 1<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  |
| Hydrochloric acid  | ≤0.1      | HNOC - Corrosive to digestive tract [severe]<br>CORROSIVE TO METALS - Category 1<br>SKIN CORROSION - Category 1B<br>SERIOUS EYE DAMAGE - Category 1<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3<br>HNOC - Corrosive to digestive tract |

**SARA 313**

Not applicable.

**State regulations**

- Massachusetts** : None of the components are listed.
- New York** : None of the components are listed.
- New Jersey** : None of the components are listed.



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## Section 15. Regulatory information

**Pennsylvania** : None of the components are listed.

### California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

|                  |   |   |
|------------------|---|---|
| Health           | * | 3 |
| Flammability     |   | 3 |
| Physical hazards |   | 0 |

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

### National Fire Protection Association (U.S.A.)



### Procedure used to derive the classification



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## Section 16. Other information

| Classification   | Justification   |
|--|---|
| COMBUSTIBLE DUSTS<br>SKIN IRRITATION - Category 2<br>GERM CELL MUTAGENICITY - Category 2<br>TOXIC TO REPRODUCTION - Category 1A<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 | On basis of test data<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method |

### History

- Date of issue/Date of revision** : 03/10/2025
- Date of previous issue** : 03/27/2023
- Version** : 3.0
- Prepared by** : Sphera Solutions
- Key to abbreviations** :
  - ATE = Acute Toxicity Estimate
  - AMP = Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift
  - BCF = Bioconcentration Factor
  - GHS = Globally Harmonized System of Classification and Labelling of Chemicals
  - IATA = International Air Transport Association
  - IBC = Intermediate Bulk Container
  - IMDG = International Maritime Dangerous Goods
  - LogPow = logarithm of the octanol/water partition coefficient
  - MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
  - N/A = Not available
  - UN = United Nations

- References** : HCS (U.S.A.)- Hazard Communication Standard  
 International transport regulations

Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.