

DENOVIX, INC.

Safety Data Sheet CUV-NA

SECTION 1: Identification

1.1 GHS Product identifier

Product name CUV-NA

1.3 Recommended use of the chemical and restrictions on use

For research use only

1.4 Supplier's details

Name DeNovix, Inc.
Address 3411 Silverside Road
Hanby Building 101
Wilmington DE 19810
USA

Telephone 302-442-6911

1.5 Emergency phone number

302-442-6911

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: WHMIS 2015

Not a hazardous substance or mixture.

2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards which do not result in classification

Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. NICOTINIC ACID

Concentration 0.0019 % (weight)
EC no. 200-441-0

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CAS no. 59-67-6

2. Water

Concentration 99.9994 % (weight)

EC no. 231-791-2

CAS no. 7732-18-5

3. HYDROGEN CHLORIDE

Concentration 0.0036 % (weight)

EC no. 231-595-7

CAS no. 7647-01-0

Index no. 017-002-01-X

- Skin corrosion/irritation, Cat. 1
- Serious eye damage/eye irritation, Cat. 1
- Acute toxicity, inhalation, Cat. 3

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

H331 Toxic if inhaled

SCLs/M-factors/ATEs Skin Corr. 1B; H314: $C \geq 25 \%$

Skin Irrit. 2; H315: $10 \% \leq C < 25 \%$

Eye Irrit. 2; H319: $10 \% \leq C < 25 \%$

STOT SE 3; H335: $C \geq 10 \%$

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact Rinse with plenty of water. Get medical attention if irritation develops and persists.

In case of eye contact Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention/advice.

If swallowed Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

SECTION 5: Fire-fighting measures

- 5.1 Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- 5.2 Specific hazards arising from the chemical**
Carbon oxides
- 5.3 Special protective actions for fire-fighters**
Wear self-contained breathing apparatus for firefighting if necessary.
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SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition.
- 6.3 Methods and materials for containment and cleaning up**
Soak up with inert absorbent material (e.g. sand, silica gel). Keep in suitable, closed containers for disposal.
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SECTION 7: Handling and storage

- 7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. For precautions see section 2.2.
- 7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place. Light sensitive.
-

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

CAS: 7647-01-0

HYDROGEN CHLORIDE (gas)

AU/SWA (Australia): 5 Peak limitation ppm; 7.5 Peak limitation mg/m³ TWA inhalation; NIOSH: 5 ppm, 7 mg/m³ REL-C inhalation; OSHA: 5 ppm, 7 mg/m³ PEL-C inhalation

8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

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Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: Physical and chemical properties

| | |
|--|--------------------------|
| Appearance, such as physical state and colour | Colorless Liquid |
| Odour | No information available |
| Odour threshold | No information available |
| pH | 3.0 |
| Melting point and freezing point | 0.0°C |
| Initial boiling point and boiling range | 100°C |
| Flash point | No information available |
| Evaporation rate | No information available |
| Flammability, in the case of solids and gases | No information available |
| Upper and lower flammability or explosive limits | No information available |
| Vapour pressure | No information available |
| Vapour density | No information available |
| Relative density | 1.0 (Water) |
| Solubility | No information available |
| Partition coefficient — n-octanol/water | No information available |
| Auto-ignition temperature | No information available |
| Decomposition temperature | No information available |
| Viscosity | No information available |

Additional properties

| | |
|----------------|-----------|
| Physical state | Liquid |
| Colour | Colorless |

Particle characteristics

Not Applicable

Supplemental information regarding physical hazard classes

No information available

Further safety characteristics (supplemental)

No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

None under normal use conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None under normal use conditions.

10.4 Conditions to avoid

None under normal use conditions.

10.5 Incompatible materials

Strong oxidizing agents

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10.6 Hazardous decomposition products

Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Based on available data, classification data are not met

Skin corrosion/irritation

Based on available data, classification data are not met

Serious eye damage/irritation

Based on available data, classification data are not met

Respiratory or skin sensitization

Based on available data, classification data are not met

Germ cell mutagenicity

Based on available data, classification data are not met

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

Reproductive toxicity

Based on available data, classification data are not met

Specific target organ toxicity (STOT) - single exposure

Based on available data, classification data are not met

Specific target organ toxicity (STOT) - repeated exposure

Based on available data, classification data are not met

Aspiration hazard

No data available

SECTION 12: Ecological information

Toxicity

FISH Mortality LC50 - Oncorhynchus mykiss (rainbow trout) - 520 mg/l - 96 h Method: OECD Test Guideline 203

DAPHINA Immobilization EC50 - Daphnia magna (Water flea) - 77 mg/l - 48 h Method: DIN 38412

TOXICITY TO ALGAE Growth inhibition IC50 - Desmodesmus subspicatus (green algae) - 90 mg/l - 72 h Method: OECD Test Guideline 201

TOXICITY TO BACTERIA Growth inhibition IC50 - Pseudomonas putida - 120 mg/l - 72

Persistence and degradability

Readily Biodegradable

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Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

No data available

Endocrine disrupting properties

No data available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Products covered by this SDS, in their original form, when disposed as waste, are considered non hazardous waste. Disposal should be in accordance with local, state and federal regulations. Dispose of empty container in the trash or recycle where facilities exist.

Packaging disposal

Dispose of as unused product.

SECTION 14: Transport information

| | | |
|------|--|------|
| 14.1 | UN Number | None |
| 14.2 | UN Proper Shipping Name | None |
| 14.3 | Transport hazard class(es) | None |
| 14.4 | Packing group | None |
| 14.5 | Environmental hazards | None |
| 14.6 | Special precautions for user | None |
| 14.7 | Transport in bulk according to IMO instruments | None |

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canadian Domestic Substances List (DSL)

Chemical name: 3-Pyridinecarboxylic acid

CAS: 59-67-6

Chemical name: Water

CAS: 7732-18-5

Chemical name: Hydrochloric acid

CAS: 7647-01-0

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Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Chemical name: Hydrochloric acid

CAS number: 7647-01-0

New Jersey Right To Know Components

Water

CAS-No. 7732-18-5

Common name: HYDROGEN CHLORIDE

CAS number: 7647-01-0

Pennsylvania Right To Know Components

Water

CAS-No. 7732-18-5

Chemical name: Hydrochloric acid

CAS number: 7647-01-0

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Hazards

No SARA Hazards

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SECTION 16: Other information

16.2 Preparation information

DISCLAIMER:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. DeNovix Inc. shall not be held liable for any damage resulting from handling or from contact with the above product