# 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<br>Hanby Building 101<br>Wilmington DE 19810<br>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: UN GHS revision 6**

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 | 0.001 - 0.002 % (weight) |
| EC no. | 200-441-0 |
| CAS no. | 59-67-6 |

**2. Water**

| | |
|---|---|
| Concentration | 95 - 99 % (weight) |
| EC no. | 231-791-2 |
| CAS no. | 7732-18-5 |

**3. HYDROGEN CHLORIDE**

| | |
|---|---|
| Concentration | 0.003 - 0.004 % (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 ≥ 25 % |
| | Skin Irrit. 2; H315: 10 % ≤ C < 25 % |
| | Eye Irrit. 2; H319: 10 % ≤ C < 25 % |
| | STOT SE 3; H335: C ≥ 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.

## 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.

## 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.

**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 (physical state, color, etc.) | Colorless Liquid |
| Odor | No information available |
| Odor threshold | No information available |
| pH | 3.0 |
| Melting point/freezing point | 0.0°C |
| Initial boiling point and boiling range | 100°C |
| Flash point | No information available |
| Evaporation rate | No information available |
| Flammability (solid, gas) | No information available |
| Upper/lower flammability or explosive limits | No information available |
| Vapor pressure | No information available |
| Vapor density | No information available |
| Relative density | 1.0 (Water) |
| Solubility(ies) | 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 |
| Color | 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

**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.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**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

**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 according to Federal RCRA regulations (40 CFR 261). 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 Related Regulations

**Japan Fire Service Law**
NOT REGULATED

**Chemical Substance Control Law**
Not applicable for Specified Chemical Substance, Monitoring Chemical Substance and Priority Assessment Chemical Substance.

**Industrial Safety and Health Law**

**Harmful Substances Prohibited from Manufacture**
Not applicable

**Harmful Substances Required Permission for Manufacture**
Not applicable

**Substances Prevented From Impairment of Health**
Not applicable

**Circular concerning Information on Chemicals having Mutagenicity - Annex 2: Information on Existing Chemicals having Mutagenicity**
Not applicable

**Circular concerning Information on Chemicals having Mutagenicity - Annex 1: Information on Notified Substances having Mutagenicity**
Not applicable

**Substances Subject to be Notified Names**
Not applicable

**Substances Subject to be Indicated Names**
Not applicable

**Ordinance on Prevention of Hazards Due to Specified Chemical Substances**
Not applicable

**Ordinance on Prevention of Lead Poisoning**
Not applicable

**Ordinance on Prevention of Tetraalkyl Lead Poisoning**
Not applicable

**Ordinance on Prevention of Organic Solvent Poisoning**
Not applicable

**Enforcement Order of the Industrial Safety and Health Law - Attached table 1 (Dangerous Substances)**
Not applicable

**Poisonous and Deleterious Substances Control Law**
Not applicable

**Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Law)**

NOT REGULATED

**Explosive Control Law**
Not applicable

**Vessel Safety Law**
Not regulated as a dangerous good

**Aviation Law**
Not regulated as a dangerous good

**High Pressure Gas Safety Act**
Not applicable

**Marine Pollution and Sea Disaster Prevention etc Law**

| | |
|---|---|
| Bulk transportation | Not classified as noxious liquid substance |
| Pack transportation | Not classified as marine pollutant |

**Waste Disposal and Public Cleansing Law**
Industrial waste

## 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