SAFETY DATA SHEET

Issuing Date 19-May-2025 **Revision Date** 19-May-2025 **Revision Number** 9

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name CN-1000-25

Product Description 1000 µg/mL Cyanide

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

Recommended Use Laboratory chemicals

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Company
Inorganic Ventures
300 Technology Drive
Christiansburg, VA 24073
web: www.inorganicventures.com

1.4. Emergency telephone number

Chemtrec 1-800-424-9300 (North America)

Chemtrec +1 703-741-5970 (International)

Europe	**See above**

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to
Regulation (EC) No. 1272/2008 [CLP]

GHS

Chronic aquatic toxicity	Category 1 - (H410)

2.2. Label elements

Product identifier



Signal word
Warning

Hazard statements
H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)
P391 - Collect spillage
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

2.3. Other hazards

Other hazards Harmful to aquatic life

No information available

SECTION 3: Composition/information on ingredients

3.1 Substances

This material is not classified according to Regulation (EC)No. 1272/2008 [CLP].

Chemical name	EC No (EU Index No)	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Sodium cyanide	205-599-4 ()	143-33-9	0.2	Acute Tox. 2 (H300) Acute Tox. 1 (H310) Acute Tox. 2 (H330) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH032)	No data available

Full text of H- and EUH-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Inhalation Immediate medical attention is required. Remove to fresh air. Artificial respiration and/or oxygen may be necessary. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Skin Contact Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. If symptoms persist, call a physician.

Ingestion Immediate medical attention is required. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person.

Self-protection of the first aider Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

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

Most Important Symptoms and Effects Difficulty in breathing.

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

Notes to Physician Treat as cyanide poisoning. Symptoms may be delayed.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
No information available

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions
Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Use personal protective equipment as required. Do not get in eyes, on skin, or on clothing.

Refer to protective measures listed in Sections 7 and 8.

Advice for emergency responders
Ensure adequate ventilation.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

See Section 12: ECOLOGICAL INFORMATION.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling
Ensure adequate ventilation.

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Chemical name	European Union	United Kingdom	France	Spain	Germany DFG
Sodium cyanide 143-33-9	TWA: 1 mg/m³ Cyanide STEL: 5 mg/m³ Cyanide Sk*	TWA: 1 mg/m³ TWA: 5 mg/m³ STEL: 5 mg/m³ STEL: 15 mg/m³ Sk*	TWA: 5 mg/m³ Sk*	TWA: 1 mg/m³ STEL: 5 mg/m³ Sk*	TWA: 3.8 mg/m³ TWA: 2 mg/m³ Peak: 3.8 mg/m³ Peak: 2 mg/m³ Sk*

Chemical name	Italy MDLPS	Portugal	Netherlands	Finland	Denmark
Sodium cyanide 143-33-9	TWA: 1 mg/m³ STEL: 5 mg/m³ Sk*	TWA: 1 mg/m³ STEL: 5 mg/m³ Sk* Ceiling: 5 mg/m³	TWA: 1 mg/m³ STEL: 5 mg/m³ Sk*	TWA: 1 mg/m³ STEL: 5 mg/m³ Sk*	TWA: 1 mg/m³ Sk* Ceiling: 5 mg/m³

Chemical name	Sweden	Austria	Switzerland	Poland	Norway	Ireland
Sodium cyanide 143-33-9	LLV: 2 mg/m³ Binding STLV: 4 mg/m³ S*	TWA: 1 mg/m³ STEL 5 mg/m³ Sk*	TWA: 3.8 mg/m³ TWA: 2 mg/m³ STEL: 3.8 mg/m³ STEL: 2 mg/m³ Sk*	TWA: 1 mg/m³ Sk* ceiling: 5 mg/m³	TWA: 0.9 ppm TWA: 1 mg/m³ TWA: 5 mg/m³ STEL: 4 ppm STEL: 5 mg/m³ STEL: 10 mg/m³ Sk*	TWA: 1 mg/m³ TWA: 5 mg/m³ STEL: 5 mg/m³ STEL: 15 mg/m³ Sk*

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles).

Hand Protection Impervious gloves.

Skin and Body Protection Impervious clothing. Boots. Chemical resistant apron.

Respiratory Protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Environmental Exposure Controls Prevent product from entering drains. Do not allow material to contaminate ground water system.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	clear / Colorless
Odor	Bitter almond
pH - VALUE 1	No data available
Melting point / melting range	No data available
Initial boiling point and boiling range	100 °C / 212 °F
Flash Point	Not applicable
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Vapor pressure @20 °C (kPa)	No data available
Relative vapor density	No data available
Relative Density	No data available
Specific gravity - VALUE 1	No data available

Water solubility	Miscible
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Dynamic viscosity - VALUE 1	No data available
Explosive Properties	No information available
Oxidizing Properties	No information available
VOC content	No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

Explosion Data

Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.

10.3. Possibility of hazardous reactions

Hazardous Polymerization
None under normal processing.

Hazardous Reactions
None under normal processing.

10.4. Conditions to avoid

Heat, flames and sparks.

10.5. Incompatible materials

Acids. Strong oxidizing agents

10.6. Hazardous decomposition products

Cyanides. Hydrogen cyanide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Toxicity

Product Information Harmful by inhalation. Harmful in contact with skin. Harmful if swallowed.

Inhalation Harmful by inhalation. Effects of overexposure may be delayed due to the slow formation of cyanide anions in the body. Cyanide anions prevent the body from using oxygen and can lead to internal asphyxiation.

Eye Contact May cause irritation.

Skin Contact Harmful in contact with skin. May be absorbed through the skin in harmful amounts. Symptoms may be delayed.

Ingestion Harmful if swallowed.

The following values are calculated based on chapter 3.1 of the GHS document

mg/kg ppm mg/l

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown acute toxicity.
0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenic effects No information available.

Reproductive Toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic life with long lasting effects

Contains 0 % of components with unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
Sodium cyanide		LC50: 0.066 - 0.0852mg/L (96h, Lepomis macrochirus) LC50: =0.15mg/L (96h, Lepomis macrochirus) LC50: 0.0391 - 0.0548mg/L (96h,	

		Oncorhynchus mykiss) LC50: 0.0558 - 0.0586mg/L (96h, Oncorhynchus mykiss) LC50: 0.0712 - 0.0936mg/L (96h, Pimephales promelas) LC50: =0.17mg/L (96h, Pimephales promelas)	

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

Mobility in soil
No information available.

12.5. Results of PBT and vPvB assessment

No information available.

Chemical name	PBT and vPvB assessment
Sodium cyanide	The substance is not PBT / vPvB

12.6. Other adverse effects

Chemical name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Endocrine disrupting potential
Sodium cyanide	Group III Chemical		

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from Residues/Unused Products Dispose of in accordance with federal, state and local regulations.

Contaminated Packaging Do not reuse empty containers.

Other Information According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

IMDG

14.1. UN-No UN1935
14.2. Proper shipping name Cyanide solution, n.o.s
14.3. Transport hazard class(es) 6
14.4. Packing Group III
Description Not applicable
14.5. Marine Pollutant None
14.6. Special Provisions None
No information available Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

RID

14.1. UN-No	UN1935
14.2. Proper shipping name	Cyanide solution, n.o.s
14.3. Transport hazard class(es)	6
14.4. Packing Group	III
Description	Not applicable
14.5. Environmental hazard	None
14.6. Special Provisions	None

ADR

14.1. UN-No	UN1935
14.2. Proper shipping name	Cyanide solution, n.o.s
14.3. Transport hazard class(es)	6
14.4. Packing Group	III
Description	Not applicable
14.5. Environmental hazard	None
14.6. Special Provisions	None

ICAO

14.1. UN-No	UN1935
14.2. Proper Shipping Name	Cyanide solution, n.o.s
14.3. Hazard Class	6
14.4. Packing Group	III
Description	Not applicable
14.5. Environmental hazard	None
14.6. Special Provisions	None

IATA-DGR

14.1. UN-No	UN1935
14.2. Proper shipping name	Cyanide solution, n.o.s
14.3. Transport hazard class(es)	6
14.4. Packing Group	III
Description	Not applicable
14.5. Environmental hazard	None
14.6. Special Provisions	None

SECTION 15: Regulatory information

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

European Union

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

International Inventories

All of the components in the product are on the following Inventory lists: U.S.A. (TSCA), Europe (EINECS/ELINCS/NLP), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), China (IECSC), Australia (AICS), Korea (ECL).

TSCA	Complies
EINECS/ELINCS	Complies
DSL/NDSL	Complies
PICCS	Complies
ENCS	Complies
IECSC	Complies
AIIC	Complies
KECL	Complies

Legend

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical safety assessment

No information available

SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3
No information available

Full text of H-Statements referred to under section 3
H300 - Fatal if swallowed
H310 - Fatal in contact with skin
H330 - Fatal if inhaled
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Revision Date 19-May-2025

Reason for Revision Not applicable.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer
The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet