



POTASSIUM CYANATE (13C, 99%; 15N, 98%) 95% CHEMICAL PURITY

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue:

Revision date: 31/12/2015

Version: 1

CNLM-3003

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

1.1. Product identifier

Product form : Substance
Substance name : POTASSIUM CYANATE (13C, 99%; 15N, 98%) 95% CHEMICAL PURITY
EC index no : 615-016-00-9 (Unlabeled)
EC no : 209-676-3 (Unlabeled)
CAS No : 590-28-3 (Unlabeled)
Product code : CNLM-3003
Formula : KO^*C^*N

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover, MA 01810
USA

USA: 1-800-322-1174 Int: 1-978-749-8000

cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)

International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute Tox. 4 (Oral) H302

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

Xn; R22

Full text of R-phrases: see section 16

GHS-US classification

Aquatic Acute 3 H402

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS07

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Safety Data Sheet

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| | |
|--------------------------------|--|
| Signal word (CLP) | : Warning |
| Hazard statements (CLP) | : H302 - Harmful if swallowed |
| Precautionary statements (CLP) | : P264 - Wash Both hands thoroughly after handling P270 - Do not eat, drink or smoke when using this product P301+P312 - IF SWALLOWED: Call a POISON CENTER/doctor/.../if you feel unwell P330 - Rinse mouth P501 - Dispose of contents/container to Comply with applicable regulations. |

GHS-US labelling

Hazard pictograms (GHS-US)



GHS07

Hazard statements (GHS-US) : H402 - Harmful to aquatic life

Precautionary statements (GHS-US) : P273 - Avoid release to the environment
P501 - Dispose of contents/container to Comply with applicable regulations.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

| Name | Product identifier | % | Classification according to Directive 67/548/EEC |
|---|--|-----|---|
| POTASSIUM CYANATE (13C, 99%; 15N, 98%) 95% CHEMICAL PURITY (Main constituent) | (CAS No) 590-28-3 (Unlabeled) (EC no) 209-676-3 (Unlabeled) (EC index no) 615-016-00-9 (Unlabeled) | 100 | Xn; R22 |
| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
| POTASSIUM CYANATE (13C, 99%; 15N, 98%) 95% CHEMICAL PURITY (Main constituent) | (CAS No) 590-28-3 (Unlabeled) (EC no) 209-676-3 (Unlabeled) (EC index no) 615-016-00-9 (Unlabeled) | 100 | Acute Tox. 4 (Oral), H302 |

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

| Name | Product identifier | % | GHS-US classification |
|---|-------------------------------|-----|-----------------------|
| POTASSIUM CYANATE (13C, 99%; 15N, 98%) 95% CHEMICAL PURITY (Main constituent) | (CAS No) 590-28-3 (Unlabeled) | 100 | Aquatic Acute 3, H402 |

Full text of H-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|---|
| First-aid measures general | : Move out of dangerous area. Consult a physician and show this safety data sheet. |
| First-aid measures after inhalation | : If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician. |
| First-aid measures after skin contact | : Wash with soap and plenty of water. Consult a physician. |
| First-aid measures after eye contact | : Flush eye with water for 15 minutes. Get medical attention. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. |

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

| | |
|--------------------------------------|---|
| Symptoms/injuries after inhalation | : May be harmful if inhaled. May cause respiratory tract irritation. |
| Symptoms/injuries after skin contact | : May be harmful if absorbed through skin. May cause skin irritation. |
| Symptoms/injuries after eye contact | : Contact may cause eye irritation. |
| Symptoms/injuries after ingestion | : Harmful if swallowed. |

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Safety Data Sheet

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

For containment : Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

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

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store at room temperature away from light and moisture.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL : >=

8.2. Exposure controls

Personal protective equipment : Gloves. Safety glasses. Protective clothing. Respiratory protection of the dependent type.



Hand protection : protective gloves.

Eye protection : Chemical goggles or safety glasses.

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : When appropriate, use NIOSH/CEN approved respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Crystalline.

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Safety Data Sheet

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| | |
|--|--------------------------------|
| Molecular mass | : 83.10 g/mol (labeled) |
| Colour | : White. |
| Odour | : No data available |
| Odour threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Self ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : 2.056 g/mol at 25 °C (77 °F) |
| Solubility | : No data available |
| Log Pow | : No data available |
| Log Kow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable if stored under recommended conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Not available.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Under fire conditions: Carbon oxides, nitrogen oxides, Potassium oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed.

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| | |
|------------|--------------------------|
| ATE (oral) | 500.000 mg/kg bodyweight |
|------------|--------------------------|

| | |
|-----------------------------------|---------------------------------------|
| Skin corrosion/irritation | : Not classified No data available |
| Serious eye damage/irritation | : Not classified No data available |
| Respiratory or skin sensitisation | : Not available No data available |
| Germ cell mutagenicity | : Not available |
| Carcinogenicity | : Not classified |

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Safety Data Sheet

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| | |
|---|---|
| Reproductive toxicity | : Not available |
| Specific target organ toxicity (single exposure) | : Not classified No data available |
| Specific target organ toxicity (repeated exposure) | : Not classified No data available |
| Aspiration hazard | : Not classified |
| Potential Adverse human health effects and symptoms | : To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. |
| Symptoms/injuries after inhalation | : May be harmful if inhaled. May cause respiratory tract irritation. |
| Symptoms/injuries after skin contact | : May be harmful if absorbed through skin. May cause skin irritation. |
| Symptoms/injuries after eye contact | : Contact may cause eye irritation. |
| Symptoms/injuries after ingestion | : Harmful if swallowed. |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|--|---|
| POTASSIUM CYANATE (13C, 99%; 15N, 98%) 95% CHEMICAL PURITY (590-28-3 (Unlabeled)) | |
| LC50 fishes 1 | 24.3 mg/l - 96 h, Oncorhynchus mykiss (rainbow trout) - |

12.2. Persistence and degradability

| | |
|--|----------------|
| POTASSIUM CYANATE (13C, 99%; 15N, 98%) 95% CHEMICAL PURITY (590-28-3 (Unlabeled)) | |
| Persistence and degradability | Not available. |

12.3. Bioaccumulative potential

| | |
|--|----------------|
| POTASSIUM CYANATE (13C, 99%; 15N, 98%) 95% CHEMICAL PURITY (590-28-3 (Unlabeled)) | |
| Bioaccumulative potential | Not available. |

12.4. Mobility in soil

| | |
|--|----------------|
| POTASSIUM CYANATE (13C, 99%; 15N, 98%) 95% CHEMICAL PURITY (590-28-3 (Unlabeled)) | |
| Ecology - soil | Not available. |

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects : Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|--------------------------------|--|
| Regional legislation (waste) | : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations. |
| Waste treatment methods | : Offer surplus and non-recyclable solutions to a licensed disposal company. |
| Waste disposal recommendations | : Dispose of as unused product. |

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Additional information

| | |
|-------------------------------|---|
| Other information | : No supplementary information available. |
| Special transport precautions | : DOT/IMDG/IATA: Not dangerous goods. |

Overland transport

No additional information available

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Transport by sea

No additional information available

Air transport

No additional information available

14.4. Environmental hazards

Other information : No supplementary information available.

14.5. Special precautions for user

Special transport precautions : DOT/IMDG/IATA: Not dangerous goods.

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

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

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| | |
|-------------------------------------|---------------------------------|
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard |
|-------------------------------------|---------------------------------|

15.2. International regulations

CANADA

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Listed on the Canadian DSL (Domestic Substances List) inventory.

15.2.1. National regulations

No additional information available

15.3. US State regulations

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| | |
|----------------------------|--|
| State or local regulations | U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. |
|----------------------------|--|

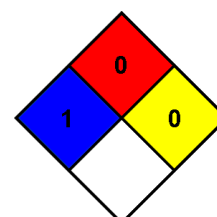
SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-phrases::

| | |
|---------------------|-----------------------------------|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| H302 | Harmful if swallowed |
| R22 | Harmful if swallowed |
| Xn | Harmful |

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard : 0 - Materials that will not burn.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



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HMIS III Rating

| | |
|--------------|--|
| Health | : 1 Slight Hazard - Irritation or minor reversible injury possible |
| Flammability | : 0 Minimal Hazard |
| Physical | : 0 Minimal Hazard |

CIL Multi-Solvent Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product