



## SAFETY DATA SHEET

### 1. Product and Company Identification

|                                    |   |
|------------------------------------|---|
| <b>Material name</b>               | Urea nitrogen (Blood Urea nitrogen, BUN) Reagent  |
| <b>Version #</b>                   | 4   |
| <b>Issue date</b>                  | 2012-06-01  |
| <b>Revision date</b>               | 2023-08-21  |
| <b>CAS #</b>                       | Mixture   |
| <b>Kit number</b>                  | C264 series, V264 series  |
| <b>Product use</b>                 | For the IN VITRO quantitative measurement of Blood Urea Nitrogen in serum and plasma.                   |
| <b>Product restrictions</b>        | None known  |
| <b>Supplier</b>                    | Catachem, Inc.<br>353 Christian Street Oxford, CT 06478<br>www.catacheminc.com<br>Phone: +1203-262-0330 |
| <b>Emergency Telephone Numbers</b> | +1203-232-1979  |

### 2. Hazards Identification

|  |  |
|--|--|
| <b>Physical state</b>                  | Liquid   |
| <b>Appearance</b>                      | Clear colorless liquid   |
| <b>Emergency overview</b>              | CAUTION<br>May cause eye, skin, and respiratory tract irritation.  |
| <b>OSHA regulatory status</b>          | This product is considered hazardous according to OSHA 29CFR 1910.1200.  |
| <b>Potential health effects</b>        |  |
| <b>Routes of exposure</b>              | Skin contact. Eye contact.   |
| <b>Eyes</b>                            | May cause eye irritation.  |
| <b>Skin</b>                            | May cause skin irritation.   |
| <b>Inhalation</b>                      | In high concentrations, vapors may be irritating to the respiratory system.  |
| <b>Ingestion</b>                       | May cause discomfort if swallowed.   |
| <b>Target organs</b>                   | Eyes.  |
| <b>Chronic effects</b>                 | No data available.   |
| <b>Signs and symptoms</b>              | Direct contact with skin and eyes may cause irritation.  |
| <b>Potential environmental effects</b> | The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. |

### 3. Composition / Information on Ingredients

| Component  | Common Name                   | CAS#     | Percent by Weight |
|--|-------------------------------|----------|-------------------|
| Ethylenediaminetetraacetic Acid Disodium, Dihydrate        | EDTA, 2Na+, 2H <sub>2</sub> O | 139-33-3 | <0.1%             |
| B-Nicotinamide Adenine Dinucleotide Hydride, Disodium Salt | b-NADH, 2 Na+                 | 606-68-8 | <0.1%             |

|                            |              |            |        |
|----------------------------|--------------|------------|--------|
| Urease                     | N/A          | 9002-13-5  | <50.0% |
| L-Glutamic Dehydrogenase   | L-GLDH       | 9029-12-3  | <10.0% |
| Hydrazoic Acid Sodium Salt | Sodium Azide | 26628-22-8 | <0.05% |

#### 4. First Aid Measures

##### First aid procedures

|                     |   |
|---------------------|---|
| <b>Eye contact</b>  | In case of contact, immediately flush eyes with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. Obtain medical attention if irritation persists. |
| <b>Skin contact</b> | In case of contact, flush with large amounts of water while removing contaminated clothing. Obtain medical attention if irritation develops and persists.   |
| <b>Inhalation</b>   | Move to fresh air. Call a physician if symptoms develop or persist.   |
| <b>Ingestion</b>    | If material is ingested, immediately contact a poison control center.   |

**Notes to physician** Provide general supportive measures and treat symptomatically.

**General advice** If you feel unwell, seek medical advice.

#### 5. Fire Fighting Measures

**Flammable properties** This product is not flammable.

##### Extinguishing media

**Suitable extinguishing media** Extinguish with water spray, carbon dioxide, dry chemical or material appropriate for the surrounding fire.

**Unsuitable extinguishing media** None known.

##### Protection of firefighters

**Specific hazards arising from the chemical** None known.

**Protective equipment and precautions for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions** Use standard firefighting procedures and consider the hazards of other involved materials.

**Hazardous combustion Products** None known.

#### 6. Accidental Release Measures

**Personal precautions** Keep unnecessary personnel away. Wear appropriate personal protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

**Environmental precautions** Do not allow to enter drains, sewers or watercourses.

|                                |   |
|--------------------------------|---|
| <b>Methods for containment</b> | Absorb spillage with non-combustible, absorbent material.   |
| <b>Methods for cleaning up</b> | Absorb spill with vermiculite or other inert material. Dispose of waste in accordance with all applicable federal, state, local and provincial environmental regulations, per Section 13. |
| <b>Other information</b>       | Clean up in accordance with all applicable regulations.   |

## 7. Handling and Storage

|                 |  |
|-----------------|--|
| <b>Handling</b> | Avoid contact with skin and eyes. Wash thoroughly after handling. In case of insufficient ventilation, wear suitable respiratory equipment. Handle and open container with care. |
| <b>Storage</b>  | Store at 2-8°C (35-46°F). Store in a closed container away from incompatible materials.  |

## 8. Exposure Controls / Personal Protection

|                                       |  |
|---------------------------------------|--|
| <b>Occupational exposure limits</b>   | No exposure limits noted for ingredient(s).  |
| <b>Exposure guidelines</b>            | Follow standard monitoring procedures.   |
| <b>Engineering controls</b>           | Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors. Provide easy access to water supply and eye wash facilities. |
| <b>Personal protective equipment</b>  |  |
| <b>Eye / face protection</b>          | Wear approved safety glasses or goggles.   |
| <b>Skin protection</b>                | Wear lab coat, gloves, or other protective garments. Remove contaminated clothing promptly.  |
| <b>Respiratory protection</b>         | Under normal conditions, respirator is not normally required.  |
| <b>General hygiene considerations</b> | Handle in accordance with good industrial hygiene and safety practice.   |

## 9. Physical & Chemical Properties

|                                     |                 |
|-------------------------------------|-----------------|
| <b>Appearance</b>                   | Colorless       |
| <b>Physical state</b>               | Liquid.         |
| <b>Form</b>                         | Liquid.         |
| <b>Color</b>                        | Colorless       |
| <b>Odor</b>                         | Odorless.       |
| <b>Odor threshold</b>               | Not available.  |
| <b>pH</b>                           | 6-8 @ ( 25°C)   |
| <b>Vapor pressure</b>               | Not available.  |
| <b>Vapor density</b>                | Not available.  |
| <b>Viscosity</b>                    | Not available.  |
| <b>Relative density</b>             | Not available.  |
| <b>Boiling point</b>                | Not available.  |
| <b>Melting point/Freezing point</b> | Not applicable. |
| <b>Solubility (water)</b>           | Soluble.        |
| <b>Specific gravity</b>             | 1-1.1           |
| <b>Flash point</b>                  | Not available.  |
| <b>Flammability limits in air,</b>  |                 |

|                                    |                |
|------------------------------------|----------------|
| <b>upper, % by volume</b>          | Not available. |
| <b>Flammability limits in air,</b> |                |
| <b>lower, % by volume</b>          | Not available. |
| <b>Auto-ignition temperature</b>   | Not available. |
| <b>Evaporation rate</b>            | Not available. |

## 10. Chemical Stability & Reactivity Information

|                                 |   |
|---------------------------------|---|
| <b>Chemical stability</b>       | Material is stable under normal conditions. |
| <b>Conditions to avoid</b>      | No data available.                          |
| <b>Incompatible materials</b>   | No data available.                          |
| <b>Hazardous decomposition</b>  |   |
| <b>Products</b>                 | None known.                                 |
| <b>Possibility of hazardous</b> |   |
| <b>Reactions</b>                | Hazardous polymerization does not occur.    |

## 11. Toxicological Information

|                                   |   |
|-----------------------------------|---|
| <b>Sensitization</b>              | Not classified.   |
| <b>Acute effects</b>              | May cause discomfort if swallowed.                      |
| <b>Local effects</b>              | Ingestion may cause irritation and nausea.              |
| <b>Chronic effects:</b>           |   |
| <b>Short term</b>                 | No data available.                                      |
| <b>Long term</b>                  | No data available.                                      |
| <b>Carcinogenicity</b>            | Not classifiable as a carcinogen to humans.             |
| <b>Epidemiology</b>               | No epidemiological data is available for this product.  |
| <b>Mutagenicity</b>               | Not classified.   |
| <b>Reproductive effects</b>       | Not classified.   |
| <b>Symptoms and target organs</b> | Direct contact with skin and eyes may cause irritation. |
| <b>Further information</b>        | No other specific acute or chronic health impact noted. |

## 12. Ecological Information

|  |  |
|--|--|
| <b>Ecotoxicity</b>                         | The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. |
| <b>Environmental effects</b>               | An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  |
| <b>Persistence and degradability</b>       | No data is available on the degradability of this product.   |
| <b>Bioaccumulation /<br/>Accumulation</b>  | Not available.   |
| <b>Mobility in environmental<br/>media</b> | The product is completely soluble in water.  |

### 13. Disposal Considerations

**Disposal instructions** Contaminated instruments and surfaces should be disinfected in accordance with your employer's chemical-specific and universal/standard precautions.

**Waste from residues / unused products** Dispose in accordance with all applicable regulations.

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport Information

**DOT** Not regulated as a hazardous material by DOT.

**IATA** Not regulated as dangerous goods.

**IMDG** Not regulated as dangerous goods.

**TDG** Not regulated as dangerous goods.

### 15. Regulatory Information

**US federal regulations** This product is considered hazardous according to OSHA 29CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpart. D)**

Not regulated.

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**CERCLA (Superfund) reportable quantity (lb.) (40 CFR 302.4)**

None

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**Section 302 extremely hazardous substance (40**

**CFR 355, Appendix A)**

**Section 311/312**

**(40 CFR370)** No

#### Drug Enforcement

**Administration (DEA) (21 CFR**

**1308.11-15)** Not controlled

**Canadian regulations** This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**WHMIS status** Non-controlled

#### Inventory status

**Country(s) or region Inventory name On inventory (yes/no)\***

Australia Australian Inventory of Chemical Substances (AICS) Yes  
353 Christian Street, Suite 2 • Oxford, Connecticut • USA 06478 • Phone: (203) 262-0330 • Fax: (203) 262-9836 • [catachem@catacheminc.com](mailto:catachem@catacheminc.com)

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|                                |  |     |
|--------------------------------|--|-----|
| Canada                         | Domestic Substances List (DSL)   | Yes |
| Canada                         | Non-Domestic Substances List (NDSL)                                    | No  |
| China                          | Inventory of Existing Chemical Substances in China (IECSC)             | Yes |
| Europe                         | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe                         | European List of Notified Chemical Substances (ELINCS)                 | No  |
| Japan                          | Inventory of Existing and New Chemical Substances (ENCS)               | Yes |
| Korea                          | Existing Chemicals List (ECL)  | Yes |
| New Zealand                    | New Zealand Inventory  | Yes |
| Philippines                    | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      |     |
| United States<br>& Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes |

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

**State regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**US. Massachusetts RTK - Substance List**

Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act**

Not regulated.

**US. Pennsylvania RTK - Hazardous Substances**

Not regulated.

**Mexico regulations** This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000).

## 16. Other Information

**Recommended restrictions** Use in accordance with supplier's recommendations.

**Further information** HMIS® is a registered trade and service mark of the NPCA.

**HMIS® ratings** Health: 0

Flammability: 0

Physical hazard: 0

**NFPA ratings** Health: 0

Flammability: 0

Instability: 0

**Disclaimer** The above information is believed to be correct, but does not purport to be all inclusive and should be used only as a guide. Catachem Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.