

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 19/04/2019 Revision date: Version: 1.0 NLM-10907

| <b>SECTION 1: Identification of the sub</b>                            | ostance/mixture and of the company/undertaking                 |  |
|--|--|--|
| 1.1. Product identifier  |  |  |
| Product form   | : Substance  |  |
| Substance name   | : OROTIC ACID, SODIUM SALT (15N2, 98%)                         |  |
| EC-No.   | : 205-834-0 (Unlabeled)  |  |
| CAS-No.  | : 154-85-8 (Unlabeled)   |  |
| Product code   | : NLM-10907  |  |
| Formula  | : C5H3*N2O4Na  |  |
| Synonyms   | : 6-Carboxy-2,4-dihydroxypyrimidine / Uracil-6-carboxylic acid |  |
| 1.2. Relevant identified uses of the sub-                              | stance or mixture and uses advised against                     |  |
| 1.2.1. Relevant identified uses  |  |  |
| Main use category  | : Professional use   |  |
| 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<br>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)                               |  |  |
| <b>SECTION 2: Hazards identification</b>                               |  |  |
| 2.1. Classification of the substance or n                              | nixture  |  |
| Classification according to Regulation (EC) I                          | No. 1272/2008 [CLP]  |  |
| Not classified   |  |  |
|  |  |  |
| Classification according to Directive 67/548/                          | EEC [DSD] or 1999/45/EC [DPD]                                  |  |
| Not classified   |  |  |
|  |  |  |
| GHS-US classification  |  |  |
| Not classified   |  |  |
| Adverse physicochemical, human health and environmental effects        |  |  |
| No additional information available                                    |  |  |
|  |  |  |
| 2.2 Label elements   |  |  |
| 2.2. Label elements  |  |  |
| Labeling according to Regulation (EC) No. 12<br>No labeling applicable | 272/2008 [CLP]   |  |

No labeling applicable

# **GHS-US** labeling

No labeling applicable

#### 2.3. **Other hazards**

No additional information available

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| SECTION 3: Composition/Information on ingredients |  |     |   |
|---|--|-----|---|
| 3.1. Substances                                   |  |     |   |
| Name  | Product identifier   | %   | Classification according to<br>Directive 67/548/EEC                   |
| OROTIC ACID, SODIUM SALT (15N2, 98%)              | (CAS-No.) 154-85-8 (Unlabeled)<br>(EC-No.) 205-834-0 (Unlabeled)<br>(EC Index-No.) | 100 | Not classified  |
| Name  | Product identifier   | %   | Classification according to<br>Regulation (EC) No.<br>1272/2008 [CLP] |
| OROTIC ACID, SODIUM SALT (15N2, 98%)              | (CAS-No.) 154-85-8 (Unlabeled)<br>(EC-No.) 205-834-0 (Unlabeled)<br>(EC Index-No.) | 100 | Not classified  |

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

| Name   | Product identifier             | %   | GHS-US classification |
|--|--------------------------------|-----|-----------------------|
| OROTIC ACID, SODIUM SALT (15N2, 98%)<br>(Main constituent) | (CAS-No.) 154-85-8 (Unlabeled) | 100 | Not classified        |

Full text of H-phrases: see section 16

| 3.2. Mixtures                           |   |
|---|---|
| Not applicable                          |   |
| SECTION 4: First aid measures           |   |
| 4.1. Description of first aid measures  |   |
| First-aid measures general              | : If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.  |
| First-aid measures after inhalation     | : When symptoms occur: go into open air and ventilate suspected area. If not breathing give<br>artificial respiration. Get medical advice/attention.  |
| First-aid measures after skin contact   | : Wash with plenty of soap and water. and soap. Get immediate medical advice/attention.   |
| First-aid measures after eye contact    | : Rinse cautiously with water for several minutes.  |
| First-aid measures after ingestion      | : Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.  |
| 4.2. Most important symptoms and eff    | ects, both acute and delayed  |
| Symptoms/effects after inhalation       | : May be harmful if inhaled. May cause respiratory irritation.  |
| Symptoms/effects after skin contact     | : May be harmful in contact with skin. May cause moderate irritation.   |
| Symptoms/effects after eye contact      | : May cause eye irritation.   |
| Symptoms/effects after ingestion        | : May be harmful if swallowed.  |
| 4.3. Indication of any immediate medic  | al attention and special treatment needed   |
| No additional information available     |   |
| <b>SECTION 5: Firefighting measures</b> |   |
| 5.1. Extinguishing media                |   |
| Suitable extinguishing media            | : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).   |
| 5.2. Special hazards arising from the s | ubstance or mixture   |
| No additional information available     |   |
| 5.3. Advice for firefighters            |   |
| Firefighting instructions               | : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection. |
| Protection during firefighting          | : Do not enter fire area without proper protective equipment, including respiratory protection.<br>Wear recommended personal protective equipment.  |
| <b>SECTION 6: Accidental release me</b> | asures  |
| 6.1. Personal precautions, protective e | equipment and emergency procedures  |
| 6.1.1. For non-emergency personnel      |   |
| Emergency procedures                    | : Avoid breathing vapors, mist, gas. Avoid dust formation.  |
| 6.1.2. For emergency responders         |   |
| Protective equipment                    | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".   |

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| <b>v</b>  |  |
|---|--|
| 6.2. Environmental precautions                              |  |
| Prevent entry to sewers and public waters. Do               | not allow to enter drains or water courses. Avoid release to the environment.  |
| 6.3. Methods and material for contain                       | nent and cleaning up   |
| For containment   | : Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal.   |
| Methods for cleaning up                                     | : This material and its container must be disposed of in a safe way, and as per local legislation.   |
| 6.4. Reference to other sections                            |  |
| For further information refer to section 13.                |  |
| SECTION 7: Handling and storage                             |  |
| 7.1. Precautions for safe handling                          |  |
| Precautions for safe handling                               | : Provide adequate ventilation to minimize dust and/or vapor concentrations.   |
| Hygiene measures  | : Wash hands and other exposed areas with mild soap and water before eating, drinking or<br>smoking and when leaving work. Handle in accordance with good industrial hygiene and safety<br>practice. |
| 7.2. Conditions for safe storage, inclu                     | ding any incompatibilities   |
| Technical measures  | : Store in a well-ventilated place. Keep container tightly closed.   |
| Storage conditions  | : Store at room temperature away from light and moisture.  |
| 7.3. Specific end use(s)                                    |  |
| No additional information available                         |  |
|   | record protection  |
| SECTION 8: Exposure controls/per                            |  |
| 8.1. Control parameters No additional information available |  |
|   |  |
| 8.2. Exposure controls                                      |  |
| Appropriate engineering controls                            | : Wash hands and other exposed areas with mild soap and water before eating, drinking or<br>smoking and when leaving work.   |
| Personal protective equipment                               | : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.   |
|   |  |
| Materials for protective clothing                           | : Wear suitable protective clothing and gloves.  |
| Hand protection   | : Wear suitable protective clothing and gloves.  |
| Eye protection  | : Wear eye protection. Chemical goggles or face shield with safety glasses.  |
| Skin and body protection                                    | : Wear suitable protective clothing, gloves and eye/face protection.   |
| Respiratory protection                                      | : In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.   |
| Environmental exposure controls                             | : Avoid release to the environment.  |
| <b>SECTION 9: Physical and chemica</b>                      | l properties   |
| 9.1. Information on basic physical and                      | chemical properties  |
| Physical state  | : Solid  |
| Appearance  | : Powder   |
| Molecular mass  | : 180.06 g/mol (Labeled)   |
| Color   | : White  |
| Odor  | : No data available  |
| Odor threshold  | : No data available  |
| pH  | : No data available  |
| Relative evaporation rate (butyl acetate=1)                 | : No data available  |
| Melting point   | : No data available  |
| Freezing point  | : No data available  |
| Boiling point   | : No data available  |
| Flash point   | : No data available  |
| A sub- severities a terrere exects we                       | No data available  |

Vapor pressure

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| Relative vapor density at 20 °C | : No data available |
|---------------------------------|---------------------|
| Relative density                | : No data available |
| 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 |
| Oxidizing properties            | : No data available |
| Explosion limits                | : No data available |

#### 9.2. **Other information**

No additional information available

| <b>SECTION 10: Stability and reactivity</b>         |   |
|---|---|
| 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                           |   |
| No additional information available                 |   |
| 10.5. Incompatible materials                        |   |
| Strong oxidizing agents.                            |   |
| 10.6. Hazardous decomposition products              |   |
| Carbon oxides (CO, CO2). Nitrogen oxides. Sod       | ium oxides.   |
| <b>SECTION 11: Toxicological informat</b>           | ion   |
| 11.1. Information on toxicological effects          |   |
| Acute toxicity                                      | : Not classified  |
| Skin corrosion/irritation                           | : Not classified  |
| Serious eye damage/irritation                       | : Not classified  |
| Respiratory or skin sensitization                   | : Not classified  |
| Germ cell mutagenicity                              | : Not classified  |
| Carcinogenicity                                     | : Not classified  |
| Reproductive toxicity                               | : Not classified  |
| Specific target organ toxicity - single exposure    | : Not classified  |
| Specific target organ toxicity – repeated exposure  | : Not classified  |
| Aspiration hazard                                   | : Not classified  |
| Potential Adverse human health effects and symptoms | : 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. |
| Symptoms/effects after inhalation                   | : May be harmful if inhaled. May cause respiratory irritation.  |
| Symptoms/effects after skin contact                 | : May be harmful in contact with skin. May cause moderate irritation.   |
| Symptoms/effects after eye contact                  | : May cause eye irritation.   |
| Symptoms/effects after ingestion                    | : May be harmful if swallowed.  |

| SECTIO    | ON 12: Ecological information |  |
|-----------|-------------------------------|--|
| 12.1.     | Toxicity                      |  |
| Ecology - | general                       | : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. |

| 12.2.                               | Persistence and degradability |  |
|-------------------------------------|-------------------------------|--|
| No additional information available |                               |  |

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|--|--|
| 12.3. Bioaccumulative potential                              |  |
| No additional information available                          |  |
| 12.4. Mobility in soil                                       |  |
| No additional information available                          |  |
| 12.5. Results of PBT and vPvB assessment                     |  |
| No additional information available                          |  |
| 12.6. Other adverse effects                                  |  |
| No additional information 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.                                 |
| Product/Packaging disposal recommendations :                 | Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. |
| Ecology - waste materials :                                  | Dispose of as unused product.  |
| SECTION 14: Transport information                            |  |
| In accordance with ADR / RID / IMDG / IATA / ADN             |  |
| 14.1. UN number  |  |
| Not applicable   |  |
| 14.2. UN proper shipping name                                |  |
| Not applicable   |  |
|  |  |
| 14.3. Additional information                                 |  |
| Other information :  | No supplementary information available.  |
|  |  |
| Overland transport   |  |
| No additional information available                          |  |
|  |  |
| Transport by sea   |  |
| No additional information available                          |  |
| Air transport  |  |
| No additional information available                          |  |
| 14.4. Environmental hazards                                  |  |
|  | No supplementary information available.  |
| 14.5. Special precautions for user                           |  |
|  | I of MARROL 72/79 and the IRC Code   |
| 14.6. Transport in bulk according to Annex<br>Not applicable | II OF MARFUL 13/18 and the IBC Code  |
|  |  |
| SECTION 15: Regulatory information                           |  |
| 15.1. US Federal regulations                                 |  |
| OROTIC ACID, SODIUM SALT (15N2, 98%) (154                    |  |
| SARA Section 302 Threshold Planning<br>Quantity (TPQ)        | Not subject to reporting requirements of the United States SARA Section 302.   |
| SARA Soction 212 Emission Poporting                          | Not subject to reporting requirements of the United States SARA Section 212  |

## SARA Section 313 - Emission Reporting Not subject to reporting requirements of the United States SARA Section 313.

# 15.2. International regulations

### **CANADA**

| OROTIC ACID, SODIUM SALT (15N2, 98%) (154-85-8 (Unlabeled)) |
|---|
| Listed on the Canadian DSL (Domestic Substances List)       |

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#### 15.2.1. **National regulations**

No additional information available

### 15.3. US State regulations

| OROTIC ACID, SODIUM SALT (15N2, 98%)(154-85-8 (Unlabeled))          |  |  |
|---|--|--|
| U.S California - Proposition 65 - Carcinogens List                  | No   |  |
| U.S California - Proposition 65 - Developmental<br>Toxicity         | No   |  |
| U.S California - Proposition 65 - Reproductive<br>Toxicity - Female | No   |  |
| U.S California - Proposition 65 - Reproductive<br>Toxicity - Male   | No   |  |
| State or local regulations  | U.S Pennsylvania - RTK (Right to Know) List<br>U.S New Jersey - Right to Know Hazardous Substance List |  |

| 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. |
| NFPA health hazard            | : 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.   |
| NFPA fire hazard              | : 0 - Materials that will not burn under typical fire conditions,<br>including intrinsically noncombustible materials such as<br>concrete, stone, and sand.  |
| NFPA reactivity               | : 0 - Material that in themselves are normally stable, even under fire conditions.   |
| Hazard Rating                 |  |
| Health                        | : 0 Minimal Hazard - No significant risk to health   |
| Flammability                  | : 0 Minimal Hazard   |
| Physical                      | : 0 Minimal Hazard   |
|                               |  |

#### CIL Substance 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