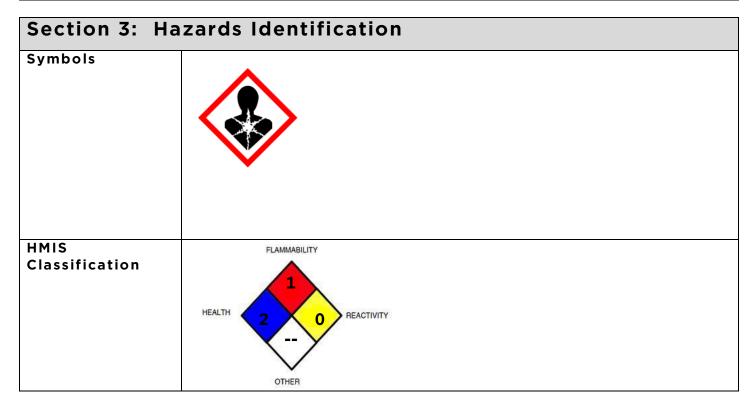


## Safety Data Sheet

| Section 1: Product & Company Identification |   |  |
|---|---|--|
| Product Name:                               | Lactate Oxidase, Recombinant  |  |
| Product #:                                  | L-1175  |  |
| Synonyms:                                   | LAo; lactate oxidative decarboxylase; lactic oxygenase;<br>lactate oxygenase; lactic oxidase; L-lactate<br>monooxygenase; lactate monooxygenase |  |
| Supplier:                                   | AG Scientific Holdings, LLC<br>9950 Scripps Lake Drive, Suite 104<br>San Diego CA 92131<br>Tele# + 858-452-9925                                 |  |
| Emergency Tele#:                            | ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585  |  |

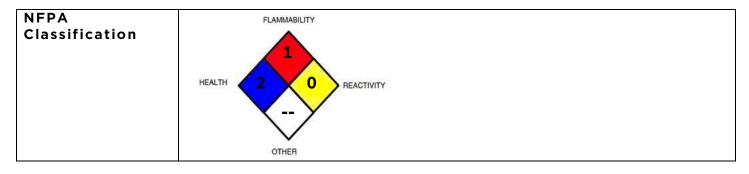
#### Section 2: Composition / Information on Ingredients

| Component       | CAS#      | EC #      | % Composition |
|-----------------|-----------|-----------|---------------|
| Lactate oxidase | 9028-72-2 | 1.13.12.4 | 100           |



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#### **Section 4: First Aid Measures**

| General     | Call a poison center or a doctor if you feel unwell.                          |  |
|-------------|---|--|
| Overview:   |   |  |
| Inhalation: | May cause an allergy or asthma symptoms or breathing difficulties if inhaled. |  |
|             | Remove person to fresh air and keep comfortable for breathing. If             |  |
|             | experiencing respiratory symptoms: Call a poison center or a doctor.          |  |
| Skin:       | May cause slight irritation. Wash skin with plenty of water.                  |  |
| Eyes:       | Rinse eyes with water as a precaution.  |  |
| Ingestion:  | Call a poison center or a doctor if you feel unwell.                          |  |
|             | See section 11 for more detailed information on health effects & symptoms.    |  |

| Flammability of | Non-flammable  |
|-----------------|--|
| the product:    |  |
| Extinguishing   | Water spray, Dry powder, Foam  |
| Media:          |  |
| Hazardous       | Toxic fumes may be released.   |
| thermal         |  |
| (de)composition |  |
| products:       |  |
| Special Fire    | Do not attempt to take action without suitable protective equipment. Self- |
| Fighting        | contained breathing apparatus. Complete protective clothing.               |
| Procedures:     |  |
| Flash Point:    | N/A  |

| Section 6: Accidental Release Measures |   |  |
|--|---|--|
| Personal                               | Exercise caution. Spill area may be slippery. Avoid breathing   |  |
| Precautions:                           | dust/fume/gas/mist/vapors/spray. Do not attempt to take action without suitable protective equipment. |  |
|  |   |  |
| Environmental                          | Avoid release to the environment.   |  |
| Precautions:                           |   |  |
| Methods for                            | Mechanically recover the product. Dispose of materials or solid residues at an                        |  |
| Clean-up:                              | authorized site.  |  |



| SECTION 7: | Handling & Storage  |
|------------|---|
| Storage:   | Store in a well-ventilated place. Keep cool. Store at -20°C   |
| Handling:  | Ensure good ventilation of the work station. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapors/spray. |

| SECTION 8: Expos                     | ure controls / Personal Protection  |
|--------------------------------------|---|
| Respiratory Protection:              | Wear respiratory protection.  |
| Skin and Body:                       | Wear suitable protective clothing.  |
| Eyes:                                | Safety glasses.   |
| Ventilation/Engineering<br>Measures: | Ensure good ventilation of the workstation. Avoid release to the environment. |
| Hygiene:                             | Handle in accordance with good industrial hygiene and safety practice.        |
| Other:                               | No data available.  |

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#### **SECTION 9: Physical and Chemical Properties**

| Appearance &             | Yellowish lyophilized powder |
|--------------------------|------------------------------|
| Odor:                    |                              |
| Formula                  | N/A                          |
| Molecular Wt.            | N/A                          |
| Melting Pt.              | No data available            |
| Boiling Pt.              | No data available            |
| Density:                 | No data available            |
| Vapor Pressure:          | No data available            |
| <b>Evaporation Rate:</b> | No data available            |
| Vapor Density:           | No data available            |
| Solubility:              | Soluble                      |
| Flash Point:             | No data available            |
| Autoignition             | No data available            |
| Temp:                    |                              |

| SECTION 10: Stability and Reactivity |   |  |
|--------------------------------------|---|--|
| Stability:                           | Stable under normal conditions.                                     |  |
| Hazardous                            | Under normal conditions of storage and use, hazardous decomposition |  |
| decomposition                        | products should not be produced.                                    |  |
| products:                            |   |  |
| Materials to Avoid:                  | No data available   |  |
| Conditions to avoid:                 | No data available   |  |

# SECTION 11: Toxicological Information RTECS#: N/A

| omponent of this product present at levels greater than or<br>% is identified as probable, possible, or confirmed human<br>by IARC.<br>component of this product present at levels greater than or<br>% is identified as probable, potential human carcinogen by<br>mponent of this product present at levels greater than or<br>% is identified as known or anticipated human carcinogen by<br>component of this product present at levels greater than or<br>% is identified as known or anticipated human carcinogen by<br>somponent of this product present at levels greater than or<br>% is identified as known or potential human carcinogen by<br>ssification on carcinogenic data is available from EPA |
|--|
|  |



# SECTION 12: Ecological Information Ecotoxicity: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. Mobility: No data available Persistence and degradability: No data available

| Bioaccumulative | No data available  |
|-----------------|--|
| potential:      |  |
| Other adverse   | No data available  |
| effects:        |  |
| Corrosivity     | No data available  |
| Characteristic: |  |
| General Notes:  | To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated. |

| SECTION 13: Disposal Considerations |  |  |
|-------------------------------------|--|--|
| Residue Waste or<br>Unused product: | Only professional staff trained in such techniques must undertake<br>waste disposal. Observe all appropriate federal, provincial, or state and<br>local regulations. |  |
| Contaminated<br>Packaging:          | Do not re-use empty containers. Dispose of as unused product.  |  |

| SECTION 14: Transportation Information |               |  |
|--|---------------|--|
| UN ID#:                                | N/A           |  |
| ADR / RID (LAND):                      | Not regulated |  |
| DOT regulations:                       | Not regulated |  |
| IMDG/IMO (SEA):                        | Not regulated |  |
| IATA/DGR (AIR):                        | Not regulated |  |
| Special Provisions:                    | N/A           |  |

| SECTION 15: Regulatory Information |  |  |
|------------------------------------|--|--|
| Health Phrases:                    | H334 - May cause an allergy or asthma symptoms or breathing difficulties if inhaled  |  |
| Risk Phrases:                      | <ul> <li>P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.</li> <li>P284 - [In case of inadequate ventilation] wear respiratory protection.</li> <li>P304+P341 - If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.</li> <li>P342+P311 - If experiencing respiratory symptoms: Call a poison center or doctor.</li> <li>P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.</li> </ul> |  |
| Safety Phrases:                    | N/A  |  |

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| EU Regulations:              | N/A  |
|------------------------------|--|
| US Regulations:              | TSCA: Not listed   |
|                              | California Proposition 65: Not listed  |
| U.S. Federal<br>Regulations: | SARA 302/304/311/312 extremely hazardous substances: No products were found  |
|                              | SARA 302/304 emergency planning and notification: No products were found.  |
|                              | SARA 302/304/311/312 hazardous chemicals: No products were found.<br>SARA 311/312 MSDS distribution-chemical inventory-hazard<br>identification: No products were found. |
|                              | SARA 313 toxic chemicals notification and release reporting: No products were found.   |
|                              | Clean Water Act (CWA) 307: No products were found.<br>Clean Water Act (CWA) 311: No products were found.   |
|                              | Clean Air Act (CAA) 112 accidental release prevention: No products were found.   |
|                              | Clean Air Act (CAA) 112 regulated flammable substances: No products were found.  |
|                              | Clean Air Act (CAA) 112 regulated toxic substances: No products were found.  |
|                              | OSHA: No products were found.  |
| WHMIS (Canada):              | N/A  |

## **SECTION 16:** Other Information

**LIABILITY STATEMENT:** The above information is believed to be correct but does not purport to be allinclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.