

### Section 1: Identification

**Product name:** Fumarate hydratase-IN-1  
**Product number:** TBI4578  
**Identified uses:** Laboratory chemicals.  
 For research use only.

**Company:** Tribioscience, Inc  
 365 San Aleso Ave  
 Sunnyvale, CA 94085

**Phone:** 408-498-0197  
**Email:** order@tribioscience.com

### Section 2: Hazard(s) Identification

**Hazard Classification:** Not a hazardous substance or mixture.  
**Signal Word:** Not a hazardous substance or mixture.  
**Hazard Statements:** Not a hazardous substance or mixture.  
**Pictogram:** Not a hazardous substance or mixture.  
**Precautionary Statements:** Not a hazardous substance or mixture.  
**Description of other hazards:** Not a hazardous substance or mixture.

### Section 3: Composition/ Information on Ingredients

**Chemical Name:** Fumarate hydratase-IN-1  
**CAS:** 1644060-37-6  
**Formula:** C<sub>2</sub>H<sub>3</sub>O<sub>4</sub><sup>2-</sup>  
**Molecular Weight:** 446.6

### Section 4: First-Aid Measures

**Skin contact:** Wash off with plenty of water. Remove contaminated clothing.

**Eye contact:** Flush eyes with running water for at least 15 minutes. Consult physician if necessary.

**Inhalation:** Remove to fresh air. Consult a physician if necessary.

**Ingestion:** Wash out mouth with water. Consult a physician if necessary.

### Section 5: Fire-Fighting Measures

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

**Unsuitable extinguishing agents:** No data available.  
**Specific hazards arising from chemical:** No data available

**Special protective equipment for firefighters:** Standard personal protective equipment for chemical fires, respirator

### Section 6: Accidental Release Measures

**Personal precautions:** Use personal protective equipment.

**Safety Data Sheet**  
**Fumarate hydratase-IN-1**

Ensure adequate ventilation.  
Avoid contact with skin.  
Avoid breathing dust, vapors, mist, or gas.

**Measures for environmental protection:** Prevent leakage or spills from the drains.

**Measures for cleaning/collecting:** Clean with inert absorbent material.  
Dispose in a suitable container.

### Section 7: Handling and Storage

**Handling:** Use personal protective equipment.  
No special handling requirement.

**Storage:** Protect from light. Store at -20°C. Keep container tightly sealed and properly labeled.

**Specific end uses:** Use in a laboratory fume hood where possible. Refer to employer's COSHH risk assessment.

### Section 8: Exposure Controls/Personal Protection

**Exposure controls:** Substances are not required for occupational exposure limit values.

**Engineering controls:** Use a fume hood where applicable. Ensure proper ventilation.

**General protective:** Use appropriate chemical resistant gloves.  
Wear suitable protective clothing to prevent skin exposure.

**Respiratory protection:** If risk assessment indicates necessary, use a suitable respirator.

**Eye protection:** Use appropriate safety goggles.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice

### Section 9: Physical and Chemical Properties

**Physical state:** Powder.

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**Fumarate hydratase-IN-1**

<b>Odor:</b>	No data available
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Melting point/freezing point:</b>	No data available.
<b>Boiling point/boiling range:</b>	No data available.
<b>Flash point:</b>	No data available.
<b>Evaporation rate:</b>	No data available.
<b>Flammability:</b>	No data available.
<b>Upper/lower flammability or explosive limits:</b>	
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	No data available.
<b>Relative density:</b>	No data available.
<b>Solubility:</b>	No data available.
<b>Partition coefficient:</b>	No data available.
<b>Auto ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

### Section 10: Stability and Reactivity

<b>Reactivity:</b>	No specific test data related to reactivity is available for this product or its ingredients.
<b>Chemical stability:</b>	The product is stable under recommended storage conditions.
<b>Possibility of hazardous reactions:</b>	Hazardous reactions will not occur under normal transport or storage conditions.
<b>Conditions to avoid:</b>	No data available
<b>Incompatible materials:</b>	No data available
<b>Hazardous decomposition products:</b>	No data available

### Section 11: Toxicological Information

<b>Acute toxicity:</b>	No data available
<b>Irritation/ Corrosion:</b>	No data available
<b>Sensitization:</b>	No data available
<b>Mutagenicity:</b>	No data available
<b>Carcinogenic effects:</b>	No data available
<b>Reproductive toxicity:</b>	No data available
<b>Teratogenicity</b>	No data available
<b>Specific target organ toxicity (STOT) - single exposure:</b>	No data available
<b>Specific target organ toxicity (STOT)- repeated exposure:</b>	No data available
<b>Aspiration hazard:</b>	No data available

### Section 12: Ecological Information

<b>Ecotoxicity:</b>	No substances known to be hazardous to the environment.
<b>Mobility:</b>	No data available.
<b>Biodegradation:</b>	No data available.

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**Bioaccumulation:** No data available.  
**Other adverse effects:** No data available.

**Section 13: Disposal Considerations**

**Waste from residues/unused products:** The generation of waste should be minimized as much as possible. Disposal of this product and solutions should entirely comply with the requirements of all applicable local, regional or national/ federal legislations

**Section 14: Transport Information**

**DOT-US/ IMDG/ IATA** Not regulated by the transportation regulation  
**UN number:** No data available.  
**UN shipping name:** No data available.  
**Hazardous class:** No data available.  
**Packing group:** No data available.  
**Transport in bulk:** No data available.  
**Special precautions:** No data available.  
**Environmental hazards:** No data available

**Section 15: Regulatory Information**

**SARA Section 311/312:** No SARA hazards  
**SARA Section 313:** No SARA hazards  
**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs):** Not contain HAPs  
**TSCA (Toxic Substances Control Act):** No data available.

**Other Information**

**Version:** New  
**Date of creation** 05/15/24

For research use only. Not intended for human or diagnostic or therapeutic uses

The above information is believed to be accurate but shall not to be taken as all inclusive. The information is to be used only as a guide. All materials and mixtures should be treated with unknow hazards and used with caution. Tribioscience, Inc shall not be held liable for any damage resulting from handling or from contact with the above product.