

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

<b>Catalogue Number</b>	CS-O-32207
<b>Product Name</b>	Landiolol Impurity 4
<b>CAS No.</b>	144256-11-1
<b>Category</b>	Impurity
<b>Synonyms</b>	(S)-(2,2-Dimethyl-1,3-dioxolan-4-yl)methyl 3-(4-hydroxyphenyl)propanoate
<b>Brand</b>	Clearsynth Labs Ltd.
<b>Identified uses</b>	Laboratory Chemicals
<b>Uses advised against</b>	Not available
<b>Company</b>	Clearsynth Labs Ltd. Mumbai, India
<b>Emergency Phone #</b>	+91-22-245045900
<b>REACH No.</b>	Not available

### SECTION 2: Hazards identification

**Disclaimer:** This is sample MSDS. Please email [sales@clearsynth.com](mailto:sales@clearsynth.com) for more details.

#### 2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Not available

#### 2.2 Label Elements

**Signal Word:** Not available

Not available

#### Hazard Statement(s)

Code	Statement
Not available	Not available

#### Precautionary Statement(s)

Code	Statement
Not available	Not available

### SECTION 3: Composition / information on ingredients

#### 3.1 Substance

Component : Landiolol Impurity 4  
CAS Number : 144256-11-1  
Molecular Formula : C<sub>15</sub>H<sub>20</sub>O<sub>5</sub>  
Molecular Weight : 280.32  
Parent Chemical : Landiolol  
Synonyms : (S)-(2,2-Dimethyl-1,3-dioxolan-4-yl)methyl 3-(4-hydroxyphenyl)propanoate  
Concentration : Not available

### SECTION 4: First aid measures

#### SECTION 4: First-aid measures

##### 4.1 Description of first aid measures

- General advice: Seek medical attention if symptoms occur or persist. Show this SDS to medical personnel.
- Inhalation: Move person to fresh air. If breathing is difficult, seek medical attention.
- Skin contact: Wash with plenty of water and soap. Remove contaminated clothing and wash before reuse. Get medical advice if irritation develops.
- Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.
- Ingestion: Rinse mouth. Do not induce vomiting unless directed by medical personnel. Seek medical attention.

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

- Not available.

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

- Treat symptomatically. No data available.

### SECTION 5: Firefighting measures

#### SECTION 5: Fire-fighting measures

##### 5.1 Extinguishing media

- Suitable extinguishing media: Use extinguishing measures appropriate to local circumstances and the surrounding environment (e.g., water spray, alcohol-resistant foam, dry chemical, carbon dioxide).
- Unsuitable extinguishing media: Not available.

##### 5.2 Special hazards arising from the substance or mixture

- Specific hazards: Not available.
- Hazardous combustion products: Not available.

##### 5.3 Advice for firefighters

- Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Avoid inhalation of combustion products.
- Use water spray to cool unopened containers exposed to fire.

### SECTION 6: Accidental release measures

#### SECTION 6: Accidental release measures

##### 6.1 Personal precautions, protective equipment and emergency procedures

- Avoid breathing dust/vapors/mist.
- Avoid contact with skin and eyes.
- Use appropriate personal protective equipment (see Section 8).
- Ensure adequate ventilation.

#### 6.2 Environmental precautions

- Prevent further leakage or spillage if safe to do so.
- Avoid release to the environment. Do not allow to enter drains/surface waters/groundwater.

#### 6.3 Methods and material for containment and cleaning up

- Contain spill.
- Collect spilled material using inert absorbent material and place in a suitable, labeled container for disposal.
- Clean contaminated area with water and detergent as appropriate.

#### 6.4 Reference to other sections

- See Section 8 for personal protective equipment and Section 13 for disposal considerations.

### SECTION-7: Handling and storage

#### SECTION 7: Handling and storage

##### 7.1 Precautions for safe handling

- Handle in accordance with good industrial hygiene and safety practice.
- Avoid formation of dust and aerosols.
- Avoid contact with skin, eyes, and clothing.
- Use with adequate ventilation.

##### 7.2 Conditions for safe storage, including any incompatibilities

- Store in a tightly closed container.
- Store in a cool, dry, well-ventilated place.
- Protect from moisture.
- Incompatible materials: Not available.

##### 7.3 Specific end use(s)

- Laboratory/research use. Not for drug, household, or other non-laboratory uses.

### SECTION 8: Exposure controls / personal protection

#### SECTION 8: Exposure controls/personal protection

##### 8.1 Control parameters

- Occupational exposure limits: No data available.
- Biological limit values: No data available.

##### 8.2 Exposure controls

- Appropriate engineering controls: Use local exhaust ventilation or general ventilation to minimize exposure.

##### Personal protective equipment (PPE):

- Eye/face protection: Safety glasses with side shields or chemical splash goggles.
- Skin protection: Protective gloves. Wear protective clothing as appropriate.
- Respiratory protection: If ventilation is inadequate or exposure is possible, use a suitable respirator in accordance with applicable regulations.

- Hygiene measures: Wash hands after handling. Do not eat, drink, or smoke when using this product.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

### SECTION 10: Stability and reactivity

#### SECTION 10: Stability and reactivity

##### 10.1 Reactivity

- No data available.

##### 10.2 Chemical stability

- Stable under recommended storage conditions.

##### 10.3 Possibility of hazardous reactions

- No data available.

##### 10.4 Conditions to avoid

- Not available.

##### 10.5 Incompatible materials

- Not available.

##### 10.6 Hazardous decomposition products

- Not available.

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

- Acute toxicity: No data available.
- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: No data available.
- Carcinogenicity: No data available.
- Reproductive toxicity: No data available.
- STOT-single exposure: No data available.
- STOT-repeated exposure: No data available.
- Aspiration hazard: No data available.

#### Likely routes of exposure

- No data available.

#### Symptoms related to the physical, chemical and toxicological characteristics

- Not available.

### SECTION 12: Ecological information

#### SECTION 12: Ecological information

##### 12.1 Toxicity

- No data available.

##### 12.2 Persistence and degradability

- No data available.

##### 12.3 Bioaccumulative potential

- No data available.

#### 12.4 Mobility in soil

- No data available.

#### 12.5 Results of PBT and vPvB assessment

- No data available.

#### 12.6 Endocrine disrupting properties

- No data available.

#### 12.7 Other adverse effects

- No data available.

### SECTION 13: Disposal considerations

#### SECTION 13: Disposal considerations

##### 13.1 Waste treatment methods

- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Do not discharge to drains.
- Contaminated packaging: Dispose of as unused product or according to local requirements.
- Waste code: Not available.

### SECTION 14: Transport information

#### SECTION 14: Transport information

- UN number: Not available.
- UN proper shipping name: Not available.
- Transport hazard class(es): Not available.
- Packing group: Not available.
- Environmental hazards: Not available.
- Special precautions for user: Not available.

Transport in bulk according to Annex II of MARPOL and the IBC Code

- Not available.

### SECTION 15: Regulatory information

#### SECTION 15: Regulatory information

##### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- Regulatory listings (e.g., TSCA/REACH/DSL/ENCS/IECSC): Not available.
- GHS classification: Not available.
- Label elements: Not available.

##### 15.2 Chemical safety assessment

- No data available.

### SECTION 16: Other information

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- Product name: Landiolol Impurity 4
- Catalog no.: CS-O-32207
- CAS no.: 144256-11-1
- Synonyms: (S)-(2,2-Dimethyl-1,3-dioxolan-4-yl)methyl 3-(4-hydroxyphenyl)propanoate
- Parent chemical: Landiolol
- Supplier: Clearsynth Labs Ltd., Mumbai, India
- Emergency phone: +91-22-245045900

#### Disclaimer

- The information provided is believed to be accurate based on available data; however, no warranty is expressed or implied. Users are responsible for determining suitability for their particular application and for compliance with applicable laws and regulations.

#### Revision information

- Revision date: Not available.
- Version: Not available.

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