

# Safety Data Sheet

Release 1.1  
Revision 10/16/2023  
Date of issue 10/16/2023

BIOSYNTH®

page 1 of 5

## 1 Identification of the substance

### 1.1 Product identifier

Identification of the substance Arformoterol tartrate

Additional identification (R,R)-Formoterol-L-(+)-tartrate

Catalogue Number BA171831

REACH No. A registration number is not available for this substance as the substance or its uses are exempted from registration or the annual tonnage does not require a registration.

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses other biochemicals

Restriction on use not for food or drug use, for laboratory use only

### 1.3 Details of the supplier of the safety data sheet

Company Biosynth Ltd  
8&9 Old Station Business Park  
COMPTON RG20 6NE

Phone +44 1635 578444

Mail customerservice@biosynth.com

### 1.4 Emergency telephone number

Phone 24hr/7days: +44 118 338 8269

## 2 Hazards identification

### 2.1 Classification of the substance or mixture

#### Physical Hazards

not classified

#### Health Hazards

Acute toxicity inhalation (Category 3), H331

Respiratory sensitiser (Category 1), H334

Acute toxicity oral (Category 4), H302

Carcinogenicity (Category 2), H351

Reproductive toxicity (Category 2), H361

Specific target organ toxicity, repeated exposure (Category 1), H372

#### Environmental Hazards

not classified

### 2.2 Label elements

#### Regulatory List

EC1272/08 Regulation (EC) 1272/2008 (GHS/CLP)

#### Symbol

GHS06 skull and crossbones

#### Pictogram



GHS08 health hazard

#### Pictogram



**Signal Word**

Danger Danger

**Hazard Statement**

H302 Harmful if swallowed.  
H331 Toxic if inhaled.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H351 Suspected of causing cancer.  
H361 Suspected of damaging fertility or the unborn child.  
H372 Causes damage to organs through prolonged or repeated exposure.

**Precautionary Statement**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P270 Do not eat, drink or smoke when using this product.  
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P304+P340 IF INHALED: Remove casualty to fresh air and keep at rest in a position comfortable for breathing.  
P308+P313 IF exposed or concerned: Get medical advice/attention.  
P501 Dispose of contents / container in accordance with local / regional / national / international regulations.

**2.3 Other hazards**

Caution! To the best of our knowledge the toxicological properties of this material have not been thoroughly investigated.

**3 Composition/information on ingredients****Substance related information**

*Substance name* Arformoterol tartrate  
*Synonyms* (R,R)-Formoterol-L-(+)-tartrate  
*Cas No.* [200815-49-2]  
*Formula* C<sub>19</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub>•C<sub>4</sub>H<sub>6</sub>O<sub>6</sub>

**4 First aid measures****4.1 Description of first aid measures****First Aid: Eye**

Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an ophthalmologist.

**First Aid: Skin**

Wash immediately with plenty of water and soap for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothes before reuse. Call a physician.

**First Aid: Ingestion**

Wash out mouth with water provided person is conscious. Call a physician.

**4.2 Most important symptoms and effects, both acute and delayed****Hints for Physician: Symptoms**

See Section 11 for additional information on health hazards

**4.3 Indication of any immediate medical attention and special treatment needed****First Aid: Inhalation**

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

**Hints for Physician: Treatment**

Treat symptomatically.

**5 Firefighting measures****5.1 Extinguishing Media****Suitable**

foam, dry extinguishing powder, carbon dioxide (CO<sub>2</sub>), water spray jet

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

Wear a self-contained breathing apparatus and chemical protective clothing.

**Hazards During Fire-Fighting**

toxic fumes

---

**5.3 Fire-Fighting/Further Advice**

Do not inhale explosion and combustion gases. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

---

**6 Accidental release measures****6.1 Personal Precautions, protective equipment and emergency procedures**

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Provide adequate ventilation.

**6.2 Environmental Precautions**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Ensure all waste water is collected and treated via a waste water treatment plant.

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

not available

**6.4 Further Accidental Release Measures**

Collect in closed and suitable containers for disposal. Clear contaminated areas thoroughly. Ventilate affected area.

---

**7 Handling and storage****7.1 Precautions for safe handling****Handling advice**

Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid prolonged or repeated exposure. Remove contaminated clothing and wash before reuse. Wash thoroughly after handling.

**7.2 Conditions for safe storage, including any incompatibilities****Storage temperature**

store at 2°C - 8°C

**Storage condition**

close container well, keep under inert gas: Nitrogen

**Storage Requirements**

Keep away from incompatible substances. Keep container tightly closed when not in use.

**7.3 Specific end use(s)****Specific end use(s)**

No Specific end use

---

**8 Exposure controles/personal protection****8.1 Exposure limit values**

Does not contain any substances with occupational exposure limits.

**8.2 Exposure controles****Industrial Hygiene**

Mechanical exhaust required. Safety shower and eye shower.

**8.3 Personal Protective Equipment****Respiratory Protection**

Wear NIOSH/MSHA or European Standard EN 149 approved respirator.

**Hand Protection**

Wear compatible chemical-resistant gloves to prevent skin exposure.

**Eye Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA.

**Body Protection**

Wear compatible chemical-resistant gloves and clothing to prevent skin exposure.

**Advice on Safe Handling**

Wash contaminated clothing before reuse. Wear appropriate protective clothing to prevent exposure.

---

**9 Physical and chemical properties****9.1 Information on basic Physical and chemical color properties***Form*

powder

*Phase Transition Solid/Liquid*

183 °C

**9.2 Other information**

*Molar Mass*  
494.49 g/mol

**10 Stability and reactivity****10.1 Reactivity**

No Data Available

**10.2 Chemical stability**

No Data Available

**10.3 Possibility of hazardous reaction**

No Data Available

**10.4 Conditions to Avoid (SDS)**

incompatible materials, air

**10.5 Incompatible materials**

strong oxidizers

**10.6 Hazardous decomposition products**

nitrogen oxides (NOx), carbon dioxide (CO<sub>2</sub>), carbon monoxide

**11 Toxicological information****11.1 Information on toxicological effects****Assessment Carcinogenicity**

Cancer suspect agent

**Assessment Toxicity to Reproduction**

May cause reproductive effects based upon animal studies.

**Other Relevant Toxicity Information**

Only selected Registry of toxic effects of chemical substances (RTECS) data is presented here. For the complete information, consult current entry in RTECS.

**12 Ecological Information****12.1 Toxicity**

Acute toxicity versus Fishing	Test Type	Species	Method	Exposure Time	Value in standard unit mg/l
	No data available	No data available	No data available	No data available	No data available
Acute toxicity in aquatic plants	Test Type	Species	Method	Exposure Time	Value in standard unit mg/l
	No data available	No data available	No data available	No data available	No data available
Acute toxicity versus Daphnia and others aquatic invertebrates	Test Type	Species	Method	Exposure Time	Value in standard unit mg/l
	No data available	No data available	No data available	No data available	No data available

**12.2 Persistence and degradability**

Remarks : no data available

**12.3 Bioaccumulative potential**

Remarks : no data available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

no data available

**12.6 Other adverse effects**

no data available

**13 Disposal considerations**

**Advice on Disposal and Packaging***Advice on Disposal*

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and Exhaust air. Dispose of waste according to laws applicable.

*Advice on Packaging*

not available

**14 Transport information**

	<b>Road Transport(ADR/GGVS)</b>	<b>Air Transport(IATA)</b>
<b>14.1 UN number</b>	2811	2811
<b>14.2 UN proper shipping name</b>	TOXIC SOLID, ORGANIC, N.O.S. (Arformoterol tartrate)	TOXIC SOLID, ORGANIC, N.O.S. (Arformoterol tartrate)
<b>14.3 Transport hazard class(es)</b>	6.1	6.1
<b>14.4 Packing group</b>	III	III
<b>14.5 Environmental hazard class(es)</b>	Not Dangerous Goods	Not Dangerous Goods
<b>14.6 Special precautions for user</b>	Passage through tunnels of category E is forbidden.	Not applicable
<b>14.7 Transport in bulk according to Annex 11 of MARPOL and the IBC code</b>	Not applicable	Not applicable

**15 Other regulations****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

not available

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Arformoterol tartrate	-----	-----	-----

**15.2 Chemical safety assessment**

No chemical safety assessment has been carried out.

**16 Additional information**

BIOSYNTH & CARBOSYNTH provides this MSDS in good faith. No representation is made as to the accuracy or comprehensiveness of the data and BIOSYNTH & CARBOSYNTH shall not be liable for any errors in the data. No representation is made as to the fitness of the data or of the materials for any particular use. No representation or warranty is made as to damages or injury. User assumes all responsibility for compliance with all laws and regulations implicated by use of this material.