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MATERIAL SAFETY DATA SHEET

Formoterol Fumarate Dihydrate

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Formoterol Fumarate Dihydrate Date: 16th April 2019 Version: Discofinechem1

Company: Discovery Fine Chemicals Ltd,
Unit 4A Old Forge Road, Ferndown Ind. Estate,
Wimborne, Dorset, BH21 7RR. United Kingdom.

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SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

2.2 Label elements

Hazard Statements: None

Precautionary Statements

P261 Avoid breathing dust

P281 Use personal protective equipment as required.

R Phrases: None

S Phrases:

S.22 Do not breathe dust

S.24/25 Avoid contact with skin and eyes

The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms: (R*,R*)-N-[2-Hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]phenyl]formamidefumarateFormoterolhemifumarate salt monohydrate

Formula: C19H24N2O4 · 0.5C4H4O4</> · H2O Molecular weight: 420.46 g/mol

CAS-No. : 183814-30-4

No components need to be disclosed according to the applicable regulations.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed - The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed - No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture - No data available
5.3 Advice for firefighters - Wear self-contained breathing apparatus for firefighting if necessary.
5.4 Further information - No data available
SECTION 6: Accidental release measures
6.1 Personal precautions, protective equipment and emergency procedures
Avoid dust formation. Avoid breathing vapours, mist or gas.
For personal protection see section 8.
6.2 Environmental precautions - Do not let product enter drains.
6.3 Methods and materials for containment and cleaning up
Sweep up and shovel. Keep in suitable, closed containers for disposal.
6.4 Reference to other sections - For disposal see section 13.
SECTION 7: Handling and storage
7.1 Precautions for safe handling - Provide appropriate exhaust ventilation at places where dust is formed.
Normal measures for preventive fire protection. For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
7.3 Specific end use(s) - No data available
SECTION 8: Exposure controls/personal protection
8.1 Control parameters
Components with workplace control parameters
Contains no substances with occupational exposure limit values.
8.2 Exposure controls
Appropriate engineering controls - General industrial hygiene practice.
Personal protective equipment
Eye/face protection - Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection - Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril®
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril®
data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de,
test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.
Body Protection - Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection - Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure - Do not let product enter drains.
SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES
9.1 Information on basic physical and chemical properties
a) Appearance: Form: solid,
b) Odour - no data available
c) Odour Threshold - no data available
d) pH - no data available
e) Melting point/freezing point - no data available
f) Initial boiling point and boiling range - no data available
g) Flash point - no data available
h) Evaporation rate - no data available
i) Flammability (solid, gas) - no data available
j) Upper/lower flammability or explosive limits - no data available

k) Vapour pressure - no data available
l) Vapour density - no data available
m) Relative density - no data available
n) Water solubility - no data available
o) Partition coefficient: n-octanol/water - no data available
p) Auto-ignition temperature - no data available
q) Decomposition temperature - no data available
r) Viscosity - no data available
s) Explosive properties - no data available
t) Oxidizing properties - no data available
9.2 Other safety information - no data available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity - no data available
10.2 Chemical stability - no data available
10.3 Possibility of hazardous reactions - no data available
10.4 Conditions to avoid - no data available
10.5 Incompatible materials - Strong oxidizing agents
10.6 Hazardous decomposition products - Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)
Other decomposition products - No data available
In the event of fire: see section 5

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 - IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity - no data available
Specific target organ toxicity - single exposure - no data available
Specific target organ toxicity - repeated exposure - no data available
Aspiration hazard - no data available
Potential health effects
Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion: May be harmful if swallowed.
Skin: May be harmful if absorbed through skin. May cause skin irritation.
Eyes: May cause eye irritation.
Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Additional Information: RTECS: Not available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity - no data available
12.2 Persistence and degradability - no data available
12.3 Bio-accumulative 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 Other adverse effects - no data available

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product - Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
Contaminated packaging - Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

14.1 UN number
ADR/RID: - IMDG: - IATA: -
14.2 UN proper shipping name
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods
14.3 Transport hazard class(es)
ADR/RID: - IMDG: - IATA: -

14.4 Packaging group
ADR/RID: - IMDG: - IATA: -
14.5 Environmental hazards
ADR/RID: no IMDG Marine pollutant: no IATA: no
14.6 Special precautions for user - no data available
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors
: Neither banned nor restricted
Restrictions on the marketing and use of certain dangerous substances and preparations
: Neither banned nor restricted
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals
: Neither banned nor restricted
Candidate List of Substances of Very High Concern for Authorisation
: Neither banned nor restricted
15.2 Chemical safety assessment
For this product a chemical safety assessment was not carried out
SECTION 16: Other information
Further information
Text of H-code(s) and R-phrase(s) mentioned in Section 2
Does not apply
WARRANTY
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product.

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