1 Identification of the substance

1.1 Product identifier

Identification of the substance: Alfacalcidol

Additional identification: 5-[(2E)-2-[(1R,3aS,7aR)-1-[(1R)-1,5-Dimethylhexyl]octahydro-7a-methyl-4H-inden-4-ylidene]ethylidene]-4-methylene-1,3-cyclohexanediol; 1-a-Hydroxycholecalciferol; 1-a-Hydroxyvitamin D3

Catalogue Number: FA17275

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: basic Intermediates

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: Carbosynth Ltd
8&9 Old Station Business Park
COMPTON RG20 6NE

Phone: +44 1635 578444

Mail: customerservice@biosynth-carbosynth.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 (Category 2)

Environmental Hazards: not classified

2.2 Label elements

Symbol: GHS06 skull and crossbones

Pictogram:

Signal Word: Danger

Hazard Statement:
H300 Fatal if swallowed.
H310 Fatal in contact with skin.
H330 Fatal if inhaled.

Precautionary Statement:
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 IF SWALLOWED:
P310 Immediately call a POISON CENTER or doctor/physician.
P302 IF ON SKIN:
P352 Wash with plenty of soap and water.
3 Composition/information on ingredients
Substance related information

Substance name: Alfacalcidol
Synonyms: 5-[(2E)-2-[(1R,3aS,7aR)-1-[(1R)-1,5-Dimethylhexyl]octahydro-7a-methyl-4H-inden-4-ylidene]ethylidene]-4-methylene-1,3-cyclohexanediol; 1-a-Hydroxycholecalciferol; 1-a-Hydroxyvitamin D3

Cas No.: [41294-56-8]
Formula: C_{27}H_{44}O_{2}

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 (CO2), water spray jet

5.2 Special hazards arising from the substance or mixture
Wear a self-contained breathing apparatus and chemical protective clothing.

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

7.3 Specific end use(s)

8 Exposure controls/personal protection
8.1 Exposure limit values
Does not contain any substances with occupational exposure limits.

8.2 Exposure controls
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
Color
white
Form
powder

9.2 Other information
Molar Mass
400.64 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

10.5 Incompatible materials
strong oxidizers

10.6 Hazardous decomposition products
carbon dioxide (CO2), carbon monoxide

11 Toxicological information
11.1 Information on toxicological effects

**Acute Toxicity**

LD50 oral, Mouse, 1 mg/kg

**Other Relevant Toxicity Information**

We are not aware of any toxicology data.

12 Ecological Information

12.1 Toxicity

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Species</th>
<th>Method</th>
<th>Exposure Time</th>
<th>Value in standard unit mg/l</th>
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<tbody>
<tr>
<td>Fishing</td>
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<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
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<tr>
<td>Acute toxicity in aquatic plants</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Acute toxicity versus Daphnia and others aquatic invertebrates</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
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</table>

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

<table>
<thead>
<tr>
<th>14.1 UN number</th>
<th>2811</th>
<th>2811</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 UN proper shipping name</td>
<td>TOXIC SOLID, ORGANIC, N.O.S.</td>
<td>TOXIC SOLID, ORGANIC, N.O.S.</td>
</tr>
<tr>
<td>14.3 Transport hazard class(es)</td>
<td>6.1</td>
<td>6.1</td>
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<tr>
<td>14.4 Packing group</td>
<td>I</td>
<td>I</td>
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<tr>
<td>14.5 Environmental hazard class(es)</td>
<td>Not Dangerous Goods</td>
<td>Not Dangerous Goods</td>
</tr>
<tr>
<td>14.6 Special precautions for user</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.7 Transport in bulk according to Annex 11 of MARPOL and the IBC code</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

15 Other regulations

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

not available
### Component

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Alfacalcidol</td>
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</tr>
</tbody>
</table>

#### 15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

#### 16 Additional information

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