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| | | | ng to Regulation (EC) No. 1907/2006 as a | | | | |
|--------------------------|--|--|--|--|--|--|--|
| | | Section 1. | Identification of the Substar | nce/Mixture and o | f the Company/U | ndertaking | |
| 1 | Produc | t Code: | 27665 | | | 5 | |
| 1.1 | | t Name: | 5.alphahydroxy Laxoge | nin | | | |
| | Synony | | | | an-6-one: Biobras- | 16: Brassinosteroid BB-16: | |
| | Synonyms:(3.beta.,5.alpha.,25R)-3,5-dihydroxyspirostan-6-one; Biobras-16; Brassinosteroid BB-16;Brassinosteroid DI-31; | | | | | | |
| .2 | Relevant identified uses of the substance or mixture and uses advised against: | | | | | | |
| | Relevant identified uses: For research use only, not for human or veterinary use. | | | | | | |
| 1.3 | Details | of the Supplier of | the Safety Data Sheet: | | | | |
| | Comp | oany Name: | Cayman Chemical Comp | bany | | | |
| | | | 1180 E. Ellsworth Rd. | | | | |
| | | | Ann Arbor, MI 48108 | | | | |
| | | site address: | www.caymanchem.com | | | | |
| | | nation: | Cayman Chemical Comp | bany | +1 (73 | 4)971-3335 | |
| 1.4 | - | ency telephone nu | | | | | |
| | Emer | gency Contact: | CHEMTREC Within USA | | | 00)424-9300 | |
| | | | CHEMTREC Outside US | | | 03)527-3887 | |
| | | | Section 2. Ha | zards Identif | ication | | |
| | | | | | | | |
| 2.1 | Classif | ication of the Subs | stance or Mixture: | | | | |
| | | ication of the Subs Elements: | tance or Mixture: | | | | |
| | Label E | Elements: | | | | | |
| | Label E GHS S | Elements: Signal Word: | tance or Mixture: None | | | | |
| | Label E GHS S GHS | Elements: Signal Word: Hazard Phrases: | None | stance or mixture i | s not classifiable a | ccording to GHS. | |
| | Label E GHS GHS Based | Elements: Signal Word: Hazard Phrases: d on evaluation of c | None urrently available data this sub | stance or mixture i | s not classifiable a | ccording to GHS. | |
| | Label E GHS GHS Based GHS | Elements: Signal Word: Hazard Phrases: d on evaluation of cl Precautionary Phr | None urrently available data this sub | stance or mixture is | s not classifiable a | ccording to GHS. | |
| | Label E GHS GHS Based GHS No ph | Elements: Signal Word: Hazard Phrases: d on evaluation of c Precautionary Phr mases apply. | None urrently available data this sub ases: | stance or mixture i | s not classifiable a | ccording to GHS. | |
| | Label E GHS GHS Based GHS No ph GHS | Elements: Signal Word: Hazard Phrases: d on evaluation of co Precautionary Phr mases apply. Response Phrases | None urrently available data this sub ases: | stance or mixture is | s not classifiable a | ccording to GHS. | |
| | Label E GHS Based GHS No ph GHS No ph | Elements: Signal Word: Hazard Phrases: d on evaluation of c Precautionary Phr mases apply. Response Phrases | None urrently available data this sub ases: s: | stance or mixture i | s not classifiable a | ccording to GHS. | |
| | Label E GHS Based GHS No ph GHS No ph GHS | Elements: Signal Word: Hazard Phrases: d on evaluation of co Precautionary Phr mases apply. Response Phrases mases apply. Storage and Dispo | None urrently available data this sub ases: s: sal Phrases: | | | ccording to GHS. | |
| | Label E GHS Based GHS No ph GHS No ph GHS Pleas | Elements: Signal Word: Hazard Phrases: d on evaluation of co Precautionary Phr mases apply. Response Phrases mases apply. Storage and Dispo | None urrently available data this sub ases: s: | | | ccording to GHS. | |
| 2.2 | Label E GHS GHS Based GHS No ph GHS Pleas UFI: | Elements: Signal Word: Hazard Phrases: d on evaluation of cl Precautionary Phr mases apply. Response Phrases mases apply. Storage and Dispo se refer to Section 7 | None urrently available data this sub ases: s: sal Phrases: for Storage and Section 13 for | r Disposal informati | on. | | |
| 2.2 | Label E GHS GHS Based GHS No pr GHS Pleas UFI: Advers | Elements: Signal Word: Hazard Phrases: d on evaluation of cl Precautionary Phr mases apply. Response Phrases mases apply. Storage and Dispo se refer to Section 7 | None urrently available data this sub ases: s: sal Phrases: for Storage and Section 13 for Material may be irritating to t | r Disposal informati he mucous membr | on. anes and upper re | | |
| 2.1 2.2 2.2 | Label E GHS GHS Based GHS No pr GHS Pleas UFI: Advers | Elements: Signal Word: Hazard Phrases: d on evaluation of cl Precautionary Phr mases apply. Response Phrases mases apply. Storage and Dispo se refer to Section 7 | None urrently available data this sub ases: s: sal Phrases: for Storage and Section 13 for Material may be irritating to t May be harmful by inhalation | r Disposal informati he mucous membr n, ingestion, or skin | on. anes and upper rea | | |
| 2.2 | Label E GHS GHS Based GHS No pr GHS Pleas UFI: Advers | Elements: Signal Word: Hazard Phrases: d on evaluation of cl Precautionary Phr mases apply. Response Phrases mases apply. Storage and Dispo se refer to Section 7 | None urrently available data this sub ases: s: sal Phrases: for Storage and Section 13 for Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp | r Disposal informati he mucous membr n, ingestion, or skin piratory system irrita | on. anes and upper rea absorption. ation. | spiratory tract. | |
| 2.2 | Label E GHS GHS Based GHS No pr GHS Pleas UFI: Advers | Elements: Signal Word: Hazard Phrases: d on evaluation of cl Precautionary Phr mases apply. Response Phrases mases apply. Storage and Dispo se refer to Section 7 se Human Health s and Symptoms: | None urrently available data this sub ases: s: sal Phrases: for Storage and Section 13 for Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge | r Disposal informati he mucous membr n, ingestion, or skin piratory system irrita e, the toxicological | on. anes and upper rea absorption. ation. properties have no | spiratory tract. t been thoroughly investigat | |
| 2.2 | Label E GHS GHS Based GHS No pr GHS Pleas UFI: Advers | Elements: Signal Word: Hazard Phrases: d on evaluation of cl Precautionary Phr mases apply. Response Phrases mases apply. Storage and Dispo se refer to Section 7 se Human Health s and Symptoms: | None urrently available data this sub ases: s: sal Phrases: for Storage and Section 13 for Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp | r Disposal informati he mucous membr n, ingestion, or skin piratory system irrita e, the toxicological | on. anes and upper rea absorption. ation. properties have no | spiratory tract. t been thoroughly investigat | |
| 2.2 2.3 | Label E GHS GHS Based GHS No pr GHS Pleas UFI: Advers Effects | Elements: Signal Word: Hazard Phrases: d on evaluation of co Precautionary Phr mases apply. Response Phrases mases apply. Storage and Dispo se refer to Section 7 se Human Health s and Symptoms: Section Hazardous Com | None urrently available data this sub ases: s: bsal Phrases: for Storage and Section 13 for Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge tion 3. Composition | r Disposal informati he mucous membr n, ingestion, or skin piratory system irrita e, the toxicological | on. anes and upper rea absorption. ation. properties have no On Ingredie EC No./ | spiratory tract. t been thoroughly investigat | |
| 2.2 2.3 | Label E GHS GHS Based GHS No pr GHS Pleas UFI: Advers Effects | Elements: Signal Word: Hazard Phrases: d on evaluation of cl Precautionary Phr mases apply. Response Phrases mases apply. Storage and Dispo se refer to Section 7 se Human Health s and Symptoms: Section | None urrently available data this sub ases: s: bsal Phrases: for Storage and Section 13 for Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge tion 3. Composition | r Disposal informati he mucous membr n, ingestion, or skin piratory system irrita e, the toxicological | on. anes and upper rea absorption. ation. properties have no on Ingredie | spiratory tract. t been thoroughly investigat nts | |
| 2.2 2.3 CAS RTE | Label E GHS GHS Based GHS No pr GHS Pleas UFI: Advers Effects | Elements: Signal Word: Hazard Phrases: d on evaluation of co Precautionary Phr mases apply. Response Phrases mases apply. Storage and Dispo se refer to Section 7 se Human Health s and Symptoms: Section Hazardous Com | None urrently available data this sub ases: s: ssal Phrases: for Storage and Section 13 for Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge tion 3. Composition bonents (Chemical Name)/ tion No. | r Disposal informati he mucous membr n, ingestion, or skin piratory system irrita e, the toxicological | on. anes and upper rea absorption. ation. properties have no On Ingredie EC No./ | spiratory tract. t been thoroughly investigat nts | |



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| | | Section 4. First Aid Measures | | | | |
|--|--|---|--|--|--|--|
| 4.1 | Description of First Aid | | | | | |
| | Measures: | | | | | |
| | In Case of Inhalation: | Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention. | | | | |
| | In Case of Skin Contact: | Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse. | | | | |
| | In Case of Eye Contact: | Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel. | | | | |
| | In Case of Ingestion: | Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel. | | | | |
| | | Section 5. Fire Fighting Measures | | | | |
| 5.1 | Suitable Extinguishing | Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. | | | | |
| | Media: | Use water spray to cool fire-exposed containers. | | | | |
| | Unsuitable Extinguishing Media: | A solid water stream may be inefficient. | | | | |
| 5.2 Flammable Properties andNo data available. | | | | | | |
| | Hazards: | | | | | |
| | | No data available. | | | | |
| | Flash Pt: | No data. | | | | |
| | Explosive Limits: | LEL: No data. UEL: No data. | | | | |
| | Autoignition Pt: | No data. | | | | |
| 5.3 | Fire Fighting Instructions | s: As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes. | | | | |
| | | Section 6. Accidental Release Measures | | | | |
| 6.1 | Protective Precautions, Protective Equipment an | Avoid raising and breathing dust, and provide adequate ventilation. d As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, | | | | |
| | Emergency Procedures: | and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves). | | | | |
| 6.2 | Environmental Precautions: | Take steps to avoid release into the environment, if safe to do so. | | | | |
| 6.3 | | r Contain spill and collect, as appropriate. | | | | |
| | | gTransfer to a chemical waste container for disposal in accordance with local regulations. | | | | |
| | Up: | | | | | |
| | | Section 7. Handling and Storage | | | | |
| 7.1 | Precautions To Be Taken | Avoid breathing dust/fume/gas/mist/vapours/spray. | | | | |
| | in Handling: | Avoid prolonged or repeated exposure. | | | | |
| 7.2 | Precautions To Be Taken | Keep container tightly closed. | | | | |
| | in Storing: | Store in accordance with information listed on the product insert. | | | | |
| | Sec | tion 8. Exposure Controls/Personal Protection | | | | |
| 8.1 | Exposure Parameters: | | | | | |
| 8.2 | Exposure Controls: | | | | | |
| 8.2.1 | Engineering Controls | Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. | | | | |

Multi-region format



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| | (Ventilation etc.): | | | | | | |
|-------|---|---|--|--|--|--|--|
| 8.2.2 | | | | | | | |
| | Eye Protection: Safety glasses | | | | | | |
| | - | Compatible chemical-resistant gloves | | | | | |
| | | | | | | | |
| | Other Protective Clothing:Lab coat | | | | | | |
| | Respiratory Equipment NIOSH approved respirator, as conditions warrant. | | | | | | |
| | (Specify Type): Work/Hygienic/Maintenan Do not take internally. | | | | | | |
| | | Facilities storing or utilizing this material should be equipped with an eyewash and a safety showe | | | | | |
| | | Wash thoroughly after handling. | | | | | |
| | I | No data available. | | | | | |
| | Se | ction 9. Physical and Chemical Properties | | | | | |
| 9.1 | | cal and Chemical Properties | | | | | |
| | Physical States: | []Gas []Liquid [X]Solid | | | | | |
| | Appearance and Odor: | A solid | | | | | |
| | pH: | No data. | | | | | |
| | Melting Point: | No data. | | | | | |
| | Boiling Point: | No data. | | | | | |
| | Flash Pt: | No data. | | | | | |
| | Evaporation Rate: | No data. | | | | | |
| | Flammability (solid, gas): | No data available. | | | | | |
| | Explosive Limits: | LEL: No data. UEL: No data. | | | | | |
| | Vapor Pressure (vs. Air or | mm No data. | | | | | |
| | Hg): | | | | | | |
| | Vapor Density (vs. Air = 1): | No data. | | | | | |
| | Specific Gravity (Water = 1 |): No data. | | | | | |
| | Solubility in Water: | No data. | | | | | |
| | Solubility Notes: | ~10 mg/ml in DMSO; ~15 mg/ml in DMF; | | | | | |
| | Octanol/Water Partition | No data. | | | | | |
| | Coefficient: | | | | | | |
| | Autoignition Pt: | No data. | | | | | |
| | Decomposition Temperatu | re: No data. | | | | | |
| | Viscosity: | No data. | | | | | |
| 9.2 | Other Information | | | | | | |
| | Percent Volatile: | No data. | | | | | |
| | Molecular Formula & Weig | ht: C27H42O5 446.6 | | | | | |
| | | Section 10. Stability and Reactivity | | | | | |
| 10.1 | Reactivity: | No data available. | | | | | |
| 10.2 | Stability: | Jnstable [] Stable [X] | | | | | |
| 10.3 | Stability Note(s): | Stable if stored in accordance with information listed on the product insert. | | | | | |
| | Polymerization: | Nill occur [] Will not occur [X] | | | | | |
| 10.4 | Conditions To Avoid: | No data available. | | | | | |
| 10.5 | Incompatibility - Materials | No data available. | | | | | |
| | To Avoid: | | | | | | |
| 10.6 | Hazardous | carbon dioxide | | | | | |
| | (| carbon monoxide | | | | | |
| | | Multi-region forma | | | | | |



| Вур | omposition or oducts: | | | | | | |
|-----------------|---------------------------------|---|------------------------|-------------------|--------|---------|--|
| | | Section 11. Toxico | ological Inforn | nation | | | |
| | mation on cological Effects: | The toxicological effects of this | product have not be | en thoroughly stu | ıdied. | | |
| CAS # | Hazardous Cor | nponents (Chemical Name) | NTP | IARC | ACGIH | OSHA | |
| 56786-63- | 1 5.alphahydroxy | / Laxogenin | n.a. | n.a. | n.a. | n.a. | |
| | | Section 12. Ecol | ogical Informa | ation | | | |
| 2.1 Toxi | city: | Avoid release into the environment. | | | | | |
| | | Runoff from fire control or dilution water may cause pollution. | | | | | |
| | istence and | No data available. | | | | | |
| - | adability: ccumulative | No data available. | | | | | |
| | ntial: | NO UALA AVAIIADIE. | | | | | |
| | ility in Soil: | No data available. | | | | | |
| | lts of PBT and vPvI | | | | | | |
| | ssment: | | | | | | |
| 2.6 Othe | r adverse effects: | No data available. | | | | | |
| | | Section 13. Dispo | sal Considera | ations | | | |
| 3.1 Was | te Disposal Method: | Dispose in accordance with loo | cal, state, and federa | l regulations. | | | |
| | | Section 14. Trar | nsport Informa | ation | | | |
| 4.1 LAN | D TRANSPORT (US | DOT): | | | | | |
| DOT Pr | oper Shipping Name | : Not dangerous goods. | | | | | |
| DOT Ha | zard Class: | | | | | | |
| UN/NA | Number: | | | | | | |
| 1.1 LAN | D TRANSPORT (Eur | opean ADR/RID): | | | | | |
| | D Shipping Name: | Not dangerous goods. | | | | | |
| UN Nun | | | | | | | |
| Hazard | | | | | | | |
| | TRANSPORT (ICAO | - | | | | | |
| UN Nur | TA Shipping Name: | Not dangerous goods. | Packing Gr | oun. | | | |
| Hazard | | | | oup. | | | |
| dditional | Transport | Transport in accordance with I | ocal, state, and fede | ral regulations. | | | |
| formatio | - | | | C | | | |
| | | Section 15. Regu | latory Inform | ation | | | |
| | | ments and Reauthorization Act | • | | | | |
| PA SARA | (Superfund Amende | | S. 302 (EHS) | C 204 DO | | | |
| PA SARA AS # | · · · | nponents (Chemical Name) | 3. 302 (EH3) | S. 304 RQ | S. 313 | B (TRI) | |



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| CAS # | Hazardous Com | ponents (Chemical Name) | Other US EPA or State Lists |
|-----------------|--------------------------|--|--|
| 56786-63-1 | 5.alphahydroxy Laxogenin | | CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No |
| Regulatory Info | ormation | This SDS was prepared in acco | rdance with 29 CFR 1910.1200 and Regulation (EC) |
| Statement: | | No.1272/2008. | |
| | | Section 16. Oth | ner Information |
| Revision Date: | | 01/10/2020 | |
| Additional Info | rmation About | No data available. | |
| This Product: | | | |
| Company Polic | cy or Disclaimer: | currently available to us. However express or implied, with respect | is believed to be accurate and represents the best information er, we make no warranty of merchantability or any other warranty, to such information, and we assume no liability resulting from its wn investigations to determine the suitability of the information for |