

| | Section 1. Id | entification of the Substance/Mixture and of th | e Company/Undertaking | | | |
|----|--|---|---|--|--|--|
| 1 | Product Code: | 24619 | | | | |
| | Product Name: | MMB-FUBICA metabolite 3 | | | | |
| | Synonyms: | (1-(4-fluorobenzyl)-1H-indole-3-carbonyl)-L-val | ine: AB-FUBICA metabolite 3: MMB-FUBICA | | | |
| | Cynonyms. | ester hydrolysis product; | | | | |
| 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. | | | | | |
| 3 | Details of the Supplier of the | e Safety Data Sheet: | | | | |
| | Company Name: | Cayman Chemical Company | | | | |
| | | 1180 E. Ellsworth Rd. | | | | |
| | Mar. 1 14 1. 1 | Ann Arbor, MI 48108 | | | | |
| | Web site address: | www.caymanchem.com | | | | |
| _ | Information: | Cayman Chemical Company | +1 (734)971-3335 | | | |
| 4 | Emergency telephone numb | | .4 (000)404 0000 | | | |
| | Emergency Contact: | CHEMTREC Within USA and Canada: CHEMTREC Outside USA and Canada: | +1 (800)424-9300 +1 (703)527-3887 | | | |
| | | | | | | |
| | | Section 2. Hazards Identifica | ation | | | |
| 1 | Classification of the Substa | nce or Mixture: | | | | |
| | Acute Toxicity: Inhalation | Category 4 | | | | |
| | - | • · | | | | |
| | Acute Toxicity: Oral, Category 4 | | | | | |
| | Aguta Taviaitus Skin, Cata | con A | | | | |
| ~ | Acute Toxicity: Skin, Cate | gory 4 | | | | |
| .2 | Acute Toxicity: Skin, Cate Label Elements: | gory 4 | | | | |
| 2 | Label Elements: | | | | | |
| 2 | - | gory 4 Warning | | | | |
| 2 | Label Elements: GHS Signal Word: GHS Hazard Phrases: | Warning | | | | |
| 2 | Label Elements: | Warning | | | | |
| 2 | Label Elements: GHS Signal Word: GHS Hazard Phrases: | Warning | | | | |
| 2 | Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. | Warning | | | | |
| 2 | Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed H312: Harmful in contact wi | Warning | | | | |
| 2 | Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed H312: Harmful in contact wi H332: Harmful if inhaled. GHS Precaution Phrases: | Warning | | | | |
| 2 | Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed H312: Harmful in contact wi H332: Harmful if inhaled. GHS Precaution Phrases: | Warning th skin. | | | | |
| 2 | Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed H312: Harmful in contact wi H332: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thorou | Warning th skin. | on}. | | | |
| 2 | Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed H312: Harmful in contact wi H332: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thorou P280: Wear {protective glow | Warning th skin. t/fume/gas/mist/vapors/spray}. ghly after handling. | on}. | | | |
| 2 | Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed H312: Harmful if ontact wi H332: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thorou P280: Wear {protective glow GHS Response Phrases: | Warning th skin. t/fume/gas/mist/vapors/spray}. ghly after handling. res/protective clothing/eye protection/face protectio | | | | |
| 2 | Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed H312: Harmful in contact wi H332: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thorou P280: Wear {protective glow GHS Response Phrases: P301+312: IF SWALLOWER | Warning th skin. t/fume/gas/mist/vapors/spray}. ghly after handling. res/protective clothing/eye protection/face protection D: P312: Call a POISON CENTER or doctor/physi | | | | |
| 2 | Label Elements: GHS Signal Word: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed H312: Harmful if swallowed H312: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thorou P280: Wear {protective glow GHS Response Phrases: P301+312: IF SWALLOWER P302+352: IF ON SKIN: Wa | Warning the skin. the skin. ghly after handling. res/protective clothing/eye protection/face protection D: P312: Call a POISON CENTER or doctor/physical ash with plenty of soap and water. | cian if you feel unwell. | | | |
| 2 | Label Elements: GHS Signal Word: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed: H312: Harmful in contact wi H332: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thorou P280: Wear {protective glow GHS Response Phrases: P301+312: IF SWALLOWED P302+352: IF ON SKIN: Wa P304+340: IF INHALED: Response | Warning th skin. t/fume/gas/mist/vapors/spray}. ghly after handling. res/protective clothing/eye protection/face protection D: P312: Call a POISON CENTER or doctor/physi ash with plenty of soap and water. emove victim to fresh air and keep at rest in a posi | cian if you feel unwell. | | | |
| 2 | Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed H312: Harmful in contact wi H332: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thorou P280: Wear {protective glow GHS Response Phrases: P301+312: IF SWALLOWED P302+352: IF ON SKIN: Wa P304+340: IF INHALED: Re P321: Specific treatment {set | Warning th skin. t/fume/gas/mist/vapors/spray}. ghly after handling. res/protective clothing/eye protection/face protection D: P312: Call a POISON CENTER or doctor/physi ash with plenty of soap and water. emove victim to fresh air and keep at rest in a posi | cian if you feel unwell. | | | |
| 2 | Label Elements: GHS Signal Word: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H312: Harmful if swallowed. H312: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thorou P280: Wear {protective glow GHS Response Phrases: P301+312: IF SWALLOWED P302+352: IF ON SKIN: Wat P304+340: IF INHALED: Ref P321: Specific treatment {set P330: Rinse mouth. | Warning th skin. t/fume/gas/mist/vapors/spray}. ghly after handling. res/protective clothing/eye protection/face protection D: P312: Call a POISON CENTER or doctor/physic ash with plenty of soap and water. emove victim to fresh air and keep at rest in a posi- ee on this label}. | cian if you feel unwell. | | | |
| 2 | Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H312: Harmful if swallowed. H312: Harmful in contact wi H332: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thorou P280: Wear {protective glow GHS Response Phrases: P301+312: IF SWALLOWEL P302+352: IF ON SKIN: Wa P304+340: IF INHALED: Response Phrases: P301: Specific treatment {set P302: Specific treatment {set P302: Rinse mouth. P362+364: Take off contameters | Warning Warning Marning Warning th skin. Warning Warning the second state of the second the skin. Warning the second state of the second the skin. Warning the second state of the second the skin. Warning the second the second state of the skin the skin. Warning the second the skin. Warning the second the skin. Warning the second the skin. Warning the s | cian if you feel unwell. | | | |
| 2 | Label Elements: GHS Signal Word: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H312: Harmful if swallowed. H312: Harmful in contact wi H332: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thorou P280: Wear {protective glow GHS Response Phrases: P301+312: IF SWALLOWEL P302+352: IF ON SKIN: Wa P304+340: IF INHALED: Re P321: Specific treatment {se P330: Rinse mouth. P362+364: Take off contam GHS Storage and Disposa | Warning Warning Marning Warning th skin. Warning Warning the second state of the second the skin. Warning the second state of the second the skin. Warning the second state of the second the skin. Warning the second the second state of the skin the skin. Warning the second the skin. Warning the second the skin. Warning the second the skin. Warning the s | cian if you feel unwell. tion comfortable for breathing. | | | |



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| 2.3 | Adverse Human Health Harmful if inhaled, swallowed, or in contact with skin. Effects and Symptoms: Material may be irritating to the mucous membranes and upper respiratory tract. May cause eye, skin, or respiratory system irritation. To the best of our knowledge, the toxicological properties have not been thoroughly investigate | | | | | t been thoroughly investigated. | |
|---|---|--|---|------------------------------|---------------------|---------------------------------|--|
| | | I | tion 3. Composition | /Information c | | | |
| | CAS # /Hazardous Components (Chemical Name)/ConcentrationEC No./GHS ClassificationRTECS #REACH Registration No.EC Index No.EC Index No. | | | | | | |
| NA NA | MMB-FUBICA metabolite 3 100.0 % NA Acute Tox.(O) 4: H302 NA Acute Tox.(D) 4: H312 | | | | | | |
| | | | Section 4. Fi | rst Aid Measu | ires | • | |
| 4.1 | Measur | tion of First Aid es: of Inhalation: | Remove to fresh air. If not bre | eathing, give artificial | respiration or giv | ve oxygen by trained personnel. | |
| | In Case | of Skin Contact: | Get immediate medical attent Immediately wash skin with s | ion. oap and plenty of wa | ter for at least 15 | 5 minutes. Remove contaminated | |
| In Case of Eye Contact: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Ha and tested by medical personnel. | | | | | | | |
| | In Case of Ingestion: Wash out mouth with water provided person is conscious. Never give anything by mouth to unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do s medical personnel. | | | | | | |
| | | | Section 5. Fire | Fighting Mea | sures | | |
| 5.1 | Media: | e Extinguishing ble Extinguishing | g Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.Use water spray to cool fire-exposed containers.ing A solid water stream may be inefficient. | | | | |
| 5.2 | | - | d No data available. | | | | |
| | - | t: ve Limits: iition Pt: | No data available. No data. LEL: No data. No data. | | | | |
| 5.3 | Fire Fighting Instructions: 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 | Protect | Protective Precautions,Avoid raising and breathing dust, and provide adequate ventilation.Protective Equipment andAs 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 6.3 | Precaut | EnvironmentalTake steps to avoid release into the environment, if safe to do so.Precautions:Methods and Material ForContain spill and collect, as appropriate. | | | | | |
| | Containment and CleaningTransfer to a chemical waste container for disposal in accordance with local regulations. Up: | | | | | | |
| l i | | | | | | Multi-region forma | |



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| | | Section 7. Handling and Storage | | | | |
|-------|--|--|--|--|--|--|
| 7.1 | Precautions To Be Taken | Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray. | | | | |
| | in Handling: | Avoid prolonged or repeated exposure. | | | | |
| 7.2 | Precautions To Be Taken | n Keep container tightly closed. | | | | |
| | in Storing: Store in accordance with information listed on the product insert. | | | | | |
| | Section | on 8. Exposure Controls/Personal Protection | | | | |
| 8.1 | Exposure Parameters: | | | | | |
| 8.2 | Exposure Controls: | | | | | |
| 8.2.1 | Engineering Controls | Jse process enclosures, local exhaust ventilation, or other engineering controls to control airborne | | | | |
| | (Ventilation etc.): | evels below recommended exposure limits. | | | | |
| 8.2.2 | Personal protection equipr | | | | | |
| | Eye Protection: | Safety glasses | | | | |
| | Protective Gloves: | Compatible chemical-resistant gloves | | | | |
| | Other Protective Clothing: | _ab coat | | | | |
| | Respiratory Equipment | VIOSH approved respirator, as conditions warrant. | | | | |
| | (Specify Type): | | | | | |
| | Work/Hygienic/Maintenan | | | | | |
| | | Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower | | | | |
| | Wash thoroughly after handling. | | | | | |
| | 1 | No data available. | | | | |
| | Se | ction 9. Physical and Chemical Properties | | | | |
| 9.1 | Information on Basic Physic | cal and Chemical Properties | | | | |
| | Physical States: | []Gas []Liquid [X]Solid | | | | |
| | Appearance and Odor: | A crystalline 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): | No data | | | | |
| | Vapor Density (vs. Air = 1): | | | | | |
| | Specific Gravity (Water = 1) | | | | | |
| | Solubility in Water: | No data. No data. | | | | |
| | | | | | | |
| | Coefficient: | | | | | |
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Multi-region format



| Revision: | 06/01/2018 |
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| 1.0011010111 | 00/01/2010 |

| | HEMICAL | | | | | | |
|-------|-------------------------------------|---|---------------------|---------------|--------|------|--|
| | Autoignition Pt: | No data. | | | | | |
| | Decomposition Temperat | | | | | | |
| | Viscosity: | No data. | | | | | |
| 9.2 | Other Information | | | | | | |
| | Percent Volatile: | No data. | | | | | |
| | Molecular Formula & Wei | ight: C21H21FN2O3 368.4 | | | | | |
| | | Section 10. Stability | and Reactiv | /ity | | | |
| 10.1 | Reactivity: No data available. | | | | | | |
| 10.2 | Stability: | Unstable [] Stable [X] | | | | | |
| 10.3 | | | | | | | |
| | Polymerization: | Will occur [] Will not occur [X | | | | | |
| 10.4 | Conditions To Avoid: | No data available. | | | | | |
| 10.5 | Incompatibility - Material | s No data available. | | | | | |
| | To Avoid: | | | | | | |
| 10.6 | Hazardous | No data available. | | | | | |
| | Decomposition or | | | | | | |
| | Byproducts: | | | | | | |
| | | Section 11. Toxicolog | cal Informa | tion | | | |
| | Information on | | | | udiad | | |
| 11.1 | Information on | The toxicological effects of this produ | ict have not been | thoroughly st | ualea. | | |
| | Toxicological Effects: | | | | | | |
| CAS # | # Hazardous Com | ponents (Chemical Name) | NTP | IARC | ACGIH | OSHA | |
| | NA MMB-FUBICA m | etabolite 3 | n.a. | n.a. | n.a. | n.a. | |
| | | Section 12. Ecologic | al Informati | on | | | |
| 12.1 | Toxicity: | Avoid release into the environment. | | | | | |
| | | Runoff from fire control or dilution wa | ter may cause po | llution. | | | |
| 12.2 | Persistence and | No data available. | | | | | |
| | Degradability: | | | | | | |
| 12.3 | Bioaccumulative | No data available. | | | | | |
| | Potential: | | | | | | |
| 12.4 | Mobility in Soil: | No data available. | | | | | |
| 12.5 | Results of PBT and vPvB | | | | | | |
| 12.0 | assessment: | | | | | | |
| 12.6 | Other adverse effects: | No data available. | | | | | |
| 12.0 | Section 13. Disposal Considerations | | | | | | |
| | • | | | | | | |
| 13.1 | waste Disposal Method: | Uispose in accordance with local, sta | ite, and rederal re | guiations. | | | |
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| Section 14. Transport Information | | | | | | | |
|---|---|--|---|--------------------|---------------------------|--|--|
| L | | | 000000000000000000000000000000000000000 | | | | |
| 14.1 LAND TRANSPORT (US DOT): DOT Proper Shipping Name: Not dangerous goods. | | | | | | | |
| DOT Prope | | i Not dangerous goods. | | | | | |
| UN/NA Nun | | | | | | | |
| | | opean ADR/RID): | | | | | |
| | - | Not dangerous goods. | | | | | |
| | ADR/RID Shipping Name: Not dangerous goods. UN Number: | | | | | | |
| Hazard Cla | SS: | | | | | | |
| 14.3 AIR TRA | ANSPORT (ICAO/ | IATA): | | | | | |
| ΙCAO/ΙΑΤΑ | Shipping Name: | Not dangerous goods. | | | | | |
| Additional Tran | nsport | Transport in accordance with lo | cal, state, and federa | al regulations. | | | |
| Information: | | | | | | | |
| | | Section 15. Regul | atory Informa | ation | | | |
| EPA SARA (Su | perfund Amendn | nents and Reauthorization Act of | of 1986) Lists | | | | |
| CAS # | Hazardous Com | ponents (Chemical Name) | S. 302 (EHS) | S. 304 RQ | S. 313 (TRI) | | |
| NA | MMB-FUBICA m | etabolite 3 | No | No | No | | |
| CAS # | Hazardous Com | ponents (Chemical Name) | Other US EPA or State Lists | | | | |
| NA | MMB-FUBICA m | etabolite 3 | 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 Regu | lation (EC) | | |
| Statement: | | No.1272/2008. | | | | | |
| | | Section 16. Oth | ner Informatio | 'n | | | |
| Revision Date: | | 06/01/2018 | | | | | |
| Additional Infor | mation About | lo data available. | | | | | |
| This Product: | | | | | | | |
| Company Polic | Company Policy or Disclaimer: DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty express or implied, with respect to such information, and we assume no liability resulting from its | | | | ty or any other warranty, | | |
| | | use. Users should make their own investigations to determine the suitability of the information for their particular purposes. | | | | | |
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