

Revision: 07/23/2018

| | Section 1. Ide | entification of the Substance/Mixture and of the | ne Company/Undertaking | | | | | |
|-----|--|---|--|--|--|--|--|--|
| 1 | Product Code: | 25745 | | | | | | |
| | Product Name: | Despropionyl para-Methylfentanyl | | | | | | |
| | Synonyms: | N-(4-methylphenyl)-1-(2-phenylethyl)-4-piperid | linamine; Despropionyl 4-Methylfentanyl; | | | | | |
| | | Despropionyl p-Methylfentanyl; para-methyl 4- | ANPP; | | | | | |
| .2 | Relevant identified uses of t | he substance or mixture and uses advised ag | ainst: | | | | | |
| | 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. | | | | | | |
| | | Ann Arbor, MI 48108 | | | | | | |
| | Web site address: | www.caymanchem.com | | | | | | |
| | Information: | Cayman Chemical Company | +1 (734)971-3335 | | | | | |
| .4 | Emergency telephone numb | per: | | | | | | |
| | Emergency Contact: | CHEMTREC Within USA and Canada: | +1 (800)424-9300 | | | | | |
| | | CHEMTREC Outside USA and Canada: | +1 (703)527-3887 | | | | | |
| | | Section 2. Hazards Identific | ation | | | | | |
| 1 | Classification of the Substa | | | | | | | |
| 2.1 | Classification of the Substance or Mixture: | | | | | | | |
| | Aguta Taviaity, Inhalation | Cotogony A | | | | | | |
| | Acute Toxicity: Inhalation, | | | | | | | |
| | Acute Toxicity: Oral, Cate | gory 4 | | | | | | |
| 0 | Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate | gory 4 | | | | | | |
| 2.2 | Acute Toxicity: Oral, Cate | gory 4 | | | | | | |
| 2.2 | Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: | gory 4 | | | | | | |
| 2.2 | Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: | gory 4 | | | | | | |
| .2 | Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: | gory 4 gory 4 | | | | | | |
| .2 | Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: | gory 4 gory 4 Warning | | | | | | |
| 2.2 | Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: GHS Hazard Phrases: | gory 4 gory 4 Warning | | | | | | |
| 2.2 | Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. | gory 4 gory 4 Warning | | | | | | |
| 2 | Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H312: Harmful in contact with | gory 4 gory 4 Warning | | | | | | |
| 2.2 | Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H312: Harmful if swallowed. H312: Harmful if inhaled. GHS Precaution Phrases: | gory 4 gory 4 Warning | | | | | | |
| 2.2 | Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H312: Harmful if swallowed. H312: Harmful if inhaled. GHS Precaution Phrases: | gory 4 gory 4 Warning th skin. | | | | | | |
| 2.2 | Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: 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} thoroug | gory 4 gory 4 Warning th skin. | on}. | | | | | |
| 2.2 | Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: 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} thoroug | gory 4 gory 4 Warning th skin. /fume/gas/mist/vapors/spray}. ghly after handling. | on}. | | | | | |
| 2.2 | Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H312: Harmful if swallowed. H312: Harmful if nhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thoroug P280: Wear {protective glow GHS Response Phrases: | gory 4 gory 4 Warning th skin. /fume/gas/mist/vapors/spray}. ghly after handling. | | | | | | |
| .2 | Acute Toxicity: Oral, Catego Acute Toxicity: Skin, Catego Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H312: Harmful if swallowed. H312: Harmful if nhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thoroug P280: Wear {protective glow GHS Response Phrases: P301+312: IF SWALLOWED | gory 4 gory 4 Warning th skin. /fume/gas/mist/vapors/spray}. ghly after handling. es/protective clothing/eye protection/face protecti | | | | | | |
| .2 | Acute Toxicity: Oral, Catego Acute Toxicity: Skin, Catego Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H312: Harmful in contact with H332: Harmful in contact with H332: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thoroug P280: Wear {protective glow GHS Response Phrases: P301+312: IF SWALLOWED P302+352: IF ON SKIN: Wa | gory 4 gory 4 Warning th skin. /fume/gas/mist/vapors/spray}. ghly after handling. res/protective clothing/eye protection/face protecti D: P312: Call a POISON CENTER or doctor/phys | ician if you feel unwell. | | | | | |
| .2 | Acute Toxicity: Oral, Catego Acute Toxicity: Skin, Catego Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H312: Harmful in contact with H332: Harmful in contact with H332: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thoroug P280: Wear {protective glow GHS Response Phrases: P301+312: IF SWALLOWED P302+352: IF ON SKIN: Wa | gory 4 gory 4 Warning th skin. /fume/gas/mist/vapors/spray}. ghly after handling. es/protective clothing/eye protection/face protecti D: P312: Call a POISON CENTER or doctor/phys ash with plenty of soap and water. emove victim to fresh air and keep at rest in a pos | ician if you feel unwell. | | | | | |
| .2 | Acute Toxicity: Oral, Catego Acute Toxicity: Skin, Catego Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H312: Harmful if swallowed. H312: Harmful if nhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thoroug P280: Wear {protective glow GHS Response Phrases: P301+312: IF SWALLOWED P302+352: IF ON SKIN: Wa P304+340: IF INHALED: Response | gory 4 gory 4 Warning th skin. /fume/gas/mist/vapors/spray}. ghly after handling. es/protective clothing/eye protection/face protecti D: P312: Call a POISON CENTER or doctor/phys ash with plenty of soap and water. emove victim to fresh air and keep at rest in a pos | ician if you feel unwell. | | | | | |
| 2 | Acute Toxicity: Oral, Catego Acute Toxicity: Skin, Catego Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H312: Harmful if swallowed. H312: Harmful if ontact with H332: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thoroug 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 P330: Rinse mouth. | gory 4 gory 4 Warning th skin. /fume/gas/mist/vapors/spray}. ghly after handling. es/protective clothing/eye protection/face protecti D: P312: Call a POISON CENTER or doctor/phys ash with plenty of soap and water. emove victim to fresh air and keep at rest in a pos | ician if you feel unwell. | | | | | |
| .2 | Acute Toxicity: Oral, Catego Acute Toxicity: Skin, Catego Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed. H312: Harmful if swallowed. H312: Harmful if ontact with H332: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thoroug 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 P330: Rinse mouth. | gory 4 gory 4 warning th skin. /fume/gas/mist/vapors/spray}. ghly after handling. es/protective clothing/eye protection/face protecti D: P312: Call a POISON CENTER or doctor/phys ash with plenty of soap and water. emove victim to fresh air and keep at rest in a pos be on this label}. inated clothing and wash it before reuse. | ician if you feel unwell. | | | | | |



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| 2.3 | | se Human Health and Symptoms: | Harmful if inhaled, swallowed Material may be irritating to t | | | spiratory tract. | | |
|------------|---|-----------------------------------|---|--|-------------------------|---|--|--|
| | | | May cause eye, skin, or respiratory system irritation. | | | | | |
| | | | | | | t been thoroughly investigated. | | |
| | | Sect | ion 3. Composition | /Information | on Ingredie | nts | | |
| CAS RTE | | Hazardous Comp REACH Registrat | oonents (Chemical Name)/ tion No. | Concentration | EC No./ EC Index No. | GHS Classification | | |
| 284 NA | 56-20-4 | Despropionyl para-M | lethylfentanyl | 100.0 % | NA NA | Acute Tox.(O) 4: H302 Acute Tox.(D) 4: H312 Acute Tox.(I) 4: H332 | | |
| | | | Section 4. Fi | rst Aid Meas | ures | | | |
| 4.1 | Descri | ption of First Aid | | | | | | |
| | Measu | res: | | | | | | |
| | In Case | e of Inhalation: | Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention. 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. Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel. Wash out mouth with water provided person is conscious. Never give anything by mouth to an | | | | | |
| | In Case | e of Skin Contact: | | | | | | |
| | In Case | e of Eye Contact: | | | | | | |
| | In Case | e of Ingestion: | | | | | | |
| | | | unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by | | | | | |
| | | | medical personnel. | | | | | |
| | | | Section 5. Fire | Fighting Me | asures | | | |
| 5.1 | Suitab | le Extinguishing | Use alcohol-resistant foam, o | tant foam, carbon dioxide, water, or dry chemical spray. | | | | |
| | Media: | | Use water spray to cool fire- | re-exposed containers. | | | | |
| | Unsuitable Extinguishing A solid water stream may be inefficient. Media: | | | | | | | |
| 5.2 | Flamm Hazard | able Properties an Is: | d No data available. | | | | | |
| | | | No data available. | | | | | |
| | Flash F | Pt: | No data. | | | | | |
| | Explos | ive Limits: | LEL: No data. UEL: No data. | | | | | |
| | Autoig | nition Pt: | No data. | | | | | |
| 5.3 | Fire Fig | ghting Instructions | nting 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. Accider | ntal Release I | Measures | | | |
| 6.1 | Protec | tive Precautions, | Avoid breathing vapors and | provide adequate ve | entilation. | | | |
| | Protective Equipment and As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator | | | | | | | |
| | Emerg | ency Procedures: | and appropriate personal pr | otection (rubber boo | ts, safety goggles | s, and heavy rubber gloves). | | |
| 6.2 | | nmental | Take steps to avoid release | into the environmen | t, if safe to do so. | | | |
| | Precau | | | | | | | |
| 6.3 | Methods and Material For Contain spill and collect, as appropriate. Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations. | | | | | | | |
| | Up: | | | | | | | |
| | | | | | | | | |
| | | | | | | Multi-region form | | |



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Section 7. Handling and Storage 7.1 Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid prolonged or repeated exposure. in Handling: 7.2 Precautions To Be Taken Keep container tightly closed. Store in accordance with information listed on the product insert. in Storing: Section 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. (Ventilation etc.): 8.2.2 Personal protection equipment: Safety glasses **Eye Protection:** Compatible chemical-resistant gloves **Protective 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 shower. ce Practices: Wash thoroughly after handling. No data available. Section 9. Physical and Chemical Properties 9.1 Information on Basic Physical and Chemical Properties **Physical States:** []Gas [] Liquid [X] Solid A crystalline solid Appearance and Odor: No data. pH: No data. **Melting Point:** No data. **Boiling Point:** Flash Pt: No data. **Evaporation Rate:** No data. No data available. Flammability (solid, gas): LEL: No data. UEL: No data. **Explosive Limits:** Vapor Pressure (vs. Air or mm No data. Hg): Vapor Density (vs. Air = 1): No data. No data. Specific Gravity (Water = 1): Solubility in Water: No data. **Octanol/Water Partition** No data. **Coefficient:**

Multi-region format



| Cay | man | | | Deshiof | nonyi para-w | letilyileii | ltallyl | Revis | ion: 07/23/2018 | |
|-------|--|------------------------|---|----------------------------------|------------------------|---------------|-------------|--------|-----------------|--|
| | Viscosity | osition Temperat /: | ure: N | lo data. lo data. lo data. | | | | | | |
| 9.2 | Other Info Percent V Molecula | | | lo data. 20H26N2 | 294.4 | | | | | |
| | | | Se | ction 10. | Stability and | Reactiv | /ity | | | |
| 10.1 | Reactivit | y: | | available. | | | <u> </u> | | | |
| 10.2 | Stability: | | Unstable [] Stable [X] | | | | | | | |
| 10.3 | Stability | Note(s): | Stable if stored in accordance with information listed on the product insert. | | | | | | | |
| | Polymeri | zation: | Will occur [] Will not occur [X] | | | | | | | |
| 10.4 | 4 Conditions To Avoid: No data available. | | | | | | | | | |
| 10.5 | | | | | | | | | | |
| | To Avoid | l: | | | | | | | | |
| 10.6 | Hazardo | us | No data | available. | | | | | | |
| | Decompo | osition or | | | | | | | | |
| | Byprodu | cts: | | | | | | | | |
| | | | Sec | tion 11. | Toxicological | Informa | ition | | | |
| 11.1 | Informati | ion on | | | cts of this product ha | | | udied. | | |
| | Toxicolo | gical Effects: | | Ū | · | | 0, | | | |
| Carci | nogenicity | - | NTP? No | D IARC I | Monographs? No | OSHA Re | gulated? No | | | |
| CAS | CAS # Hazardous Components (Chemical Name) NTP IA | | | | | | IARC | ACGIH | OSHA | |
| 284 | 56-20-4 | Despropionyl para | a-Methylfe | entanyl | | n.a. | n.a. | n.a. | n.a. | |
| | | | Se | ection 12 | . Ecological I | nformati | on | | | |
| 12.1 | Toxicity: | | Avoid release into the environment. | | | | | | | |
| | · · | | Runoff from fire control or dilution water may cause pollution. | | | | | | | |
| 12.2 | .2 Persistence and No data available. Degradability: | | | | | | | | | |
| 40.0 | - | - | No doto | ovoiloblo | | | | | | |
| 12.3 | | | | | | | | | | |
| 12.4 | Potential: | | | | | | | | | |
| 12.4 | - | | | | | | | | | |
| 12.5 | | | NU Uala | avallable. | | | | | | |
| 12.6 | assessment: Other adverse effects: No data available. | | | | | | | | | |
| | | | Sec | tion 13. | Disposal Cor | nsiderati | ons | | | |
| 13.1 | Waste Di | sposal Method: | Dispose | in accordanc | e with local, state, a | nd federal re | gulations. | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
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Multi-region format



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| Section 14. Transport Information | | | | | | | | | |
|-----------------------------------|--|--|---|--------------------|--------------|--|--|--|--|
| 14.1 LAND TRANSPORT (US DOT): | | | | | | | | | |
| DOT Hazar | DOT Proper Shipping Name: Not dangerous goods. DOT Hazard Class: UN/NA Number: | | | | | | | | |
| 14.1 LAND T | | | | | | | | | |
| ADR/RID S | hipping Name: | Not dangerous goods. | | | | | | | |
| UN Numbe | UN Number: | | | | | | | | |
| Hazard Cla | Hazard Class: | | | | | | | | |
| 14.3 AIR TR | ANSPORT (ICAO/ | IATA): | | | | | | | |
| ΙCAO/ΙΑΤΑ | Shipping Name: | Not dangerous goods. | | | | | | | |
| Additional Trai | nsport | Transport in accordance with lo | cal, state, and federa | al regulations. | | | | | |
| Information: | | | | | | | | | |
| | | Section 15. Regul | atory Informa | tion | | | | | |
| EPA SARA (Su | perfund Amendn | nents and Reauthorization Act | of 1986) Lists | | | | | | |
| CAS # | Hazardous Com | ponents (Chemical Name) | S. 302 (EHS) | S. 304 RQ | S. 313 (TRI) | | | | |
| 28456-20-4 | Despropionyl par | a-Methylfentanyl | No | No | No | | | | |
| CAS # | Hazardous Com | ponents (Chemical Name) | Other US EPA or | State Lists | | | | | |
| 28456-20-4 | Despropionyl par | a-Methylfentanyl | CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No | | | | | | |
| Regulatory Info | ormation | This SDS was prepared in acco No.1272/2008. | rdance with 29 CFR | 1910.1200 and Regu | lation (EC) | | | | |
| | | Section 16. Oth | ner Informatio | n | | | | | |
| Revision Date: | | 07/23/2018 | | | | | | | |
| Additional Info | mation About | No data available. | | | | | | | |
| This Product: | | | | | | | | | |
| Company Polic | y 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 use. Users should make their own investigations to determine the suitability of the information for their particular purposes. | | | | | | | |
| | | | | | | | | | |