

Revision: 03/07/2019

| | | Cooling 1 | philipping of the Cubert | oo/Minterro | the Commence /// | adartaking | |
|-----|--|---|--|---|--|---|--|
| | | Section 1. Ide | entification of the Substand | ce/Mixture and of | the Company/Ur | ndertaking | |
| .1 | Product | | 26770 | | | | |
| | Product | | 1,3-Dinonadecanoyl-rac-g | | | | |
| | Synony | ms: | | 2-hydroxy-1,3-propa | -propanediyl) ester; C38 DAG; DG(19:0/0:0/19:0); | | |
| | 1,3-Dinonadecanoin; | | | | | | |
| .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 | any Name: | Cayman Chemical Compa | any | | | |
| | | | 1180 E. Ellsworth Rd. | | | | |
| | | M | Ann Arbor, MI 48108 | | | | |
| | | ite address: | www.caymanchem.com | | | 0074 0007 | |
| | Inform | | Cayman Chemical Compa | any | +1 (734 | 4)971-3335 | |
| .4 | - | ncy telephone numb | | | | | |
| | Emerg | gency Contact: | CHEMTREC Within USA | | | 0)424-9300 | |
| | | | CHEMTREC Outside USA | A and Canada: | +1 (703 | 3)527-3887 | |
| | | | Section 2. Haz | ards Identific | cation | | |
| 2.1 | Classifi | cation of the Substar | nce or Mixture: | | | | |
| 2.2 | Label E | lements: | | | | | |
| | Label Elements: | | | | | | |
| | CHC C | Signal Word: | Nono | | | | |
| | | Signal Word: | None | | | | |
| | GHS I | Hazard Phrases: | | tance or mixture is | not classifiable ac | cording to GHS | |
| | GHS I Based | Hazard Phrases: I on evaluation of curre | None ently available data this subs | tance or mixture is | not classifiable ac | cording to GHS. | |
| | GHS I Based GHS I | Hazard Phrases: I on evaluation of curre Precaution Phrases: | | stance or mixture is | not classifiable ac | cording to GHS. | |
| | GHS H Based GHS H No ph | Hazard Phrases: I on evaluation of curre Precaution Phrases: rases apply. | | tance or mixture is | not classifiable ac | cording to GHS. | |
| | GHS H Based GHS H No ph GHS H | Hazard Phrases: I on evaluation of curre Precaution Phrases: rases apply. Response Phrases: | | tance or mixture is | not classifiable ac | cording to GHS. | |
| | GHS I Based GHS I No ph GHS I No ph | Hazard Phrases: I on evaluation of curre Precaution Phrases: rases apply. Response Phrases: rases apply. | ently available data this subs | tance or mixture is | not classifiable ac | cording to GHS. | |
| | GHS F Based GHS F No ph GHS F No ph GHS S | Hazard Phrases: I on evaluation of curre Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa | ently available data this subs | | | cording to GHS. | |
| | GHS I Based GHS I No ph GHS I GHS S Please | Hazard Phrases: I on evaluation of curre Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for | ently available data this subs I Phrases: Storage and Section 13 for | Disposal informatio | n. | | |
| 2.3 | GHS H Based GHS F No ph GHS F Or ph GHS S Please Advers | Hazard Phrases: I on evaluation of curre Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for e Human Health | ently available data this subs I Phrases: Storage and Section 13 for laterial may be irritating to th | Disposal informatio ne mucous membrai | n. nes and upper res | | |
| 2.3 | GHS H Based GHS F No ph GHS F Or ph GHS S Please Advers | Hazard Phrases: I on evaluation of curred Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposation e refer to Section 7 for e Human Health M and Symptoms: M | ently available data this subs I Phrases: Storage and Section 13 for laterial may be irritating to th lay be harmful by inhalation, | Disposal information ne mucous membrai ingestion, or skin a | n. nes and upper res bsorption. | | |
| 2.3 | GHS H Based GHS F No ph GHS F Or ph GHS S Please Advers | Hazard Phrases: I on evaluation of curre Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for e Human Health M and Symptoms: M | ently available data this subs I Phrases: Storage and Section 13 for laterial may be irritating to th lay be harmful by inhalation, lay cause eye, skin, or respin | Disposal information ne mucous membran ingestion, or skin a ratory system irritati | n. nes and upper res bsorption. on. | piratory tract. | |
| 2.3 | GHS H Based GHS F No ph GHS F Or ph GHS S Please Advers | Hazard Phrases: I on evaluation of curre Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for e Human Health M and Symptoms: M T | ently available data this subs I Phrases: Storage and Section 13 for laterial may be irritating to th lay be harmful by inhalation, lay cause eye, skin, or respin o the best of our knowledge, | Disposal information ne mucous membran ingestion, or skin a ratory system irritati , the toxicological pr | n. nes and upper res bsorption. on. roperties have not | piratory tract. been thoroughly investigated | |
| 2.3 | GHS H Based GHS F No ph GHS F Or ph GHS S Please Advers | Hazard Phrases: I on evaluation of curre Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for e Human Health M and Symptoms: M T | ently available data this subs I Phrases: Storage and Section 13 for laterial may be irritating to th lay be harmful by inhalation, lay cause eye, skin, or respin | Disposal information ne mucous membran ingestion, or skin a ratory system irritati , the toxicological pr | n. nes and upper res bsorption. on. roperties have not | piratory tract. been thoroughly investigated | |
| 2.3 | GHS I Based GHS I No ph GHS S Please Advers Effects | Hazard Phrases: I on evaluation of curre Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for e Human Health M and Symptoms: M T Sectio | ently available data this subs I Phrases: Storage and Section 13 for laterial may be irritating to th lay be harmful by inhalation, lay cause eye, skin, or respin o the best of our knowledge, n 3. Composition/ ments (Chemical Name)/ | Disposal information ne mucous membran ingestion, or skin a ratory system irritati , the toxicological pr | n. nes and upper res bsorption. on. roperties have not | piratory tract. been thoroughly investigated | |



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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 | A solid water stream may be inefficient. |
| | Media: | |
| 5.2 | Flammable Properties an Hazards: | dNo data available. |
| | | 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 6.2 | Protective Precautions, Protective Equipment an Emergency Procedures: Environmental | Avoid raising and breathing dust, and provide adequate ventilation. d As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves). Take steps to avoid release into the environment, if safe to do so. |
| 0.2 | Precautions: | |
| 6.3 | Methods and Material Fo | r Contain spill and collect, as appropriate. |
| | Containment and Cleanir | hgTransfer to a chemical waste container for disposal in accordance with local regulations. |
| | Up: | |
| | | Section 7. Handling and Storage |
| 7.1 | Precautions To Be Taker | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| | in Handling: | Avoid prolonged or repeated exposure. |
| 7.2 | Precautions To Be Taker | 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: | |

Multi-region format



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| ols to control airborne | | | | |
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| H approved respirator, as conditions warrant. | | | | |
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| ot take internally. ties storing or utilizing this material should be equipped with an eyewash and a safety shower | | | | |
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Multi-region format

| | | | Section 10. Stability | | | | | |
|---|---|---|--|--|---|--------|------|--|
| 10.1 | Reactivit | ty: | No data available. | | | | | |
| 10.2 | Stability | : | Unstable [] Stable [X] | | | | | |
| 10.3 | Stability Note(s): | | Stable if stored in accordance with information listed on the product insert. | | | | | |
| | Polymer | ization: | Will occur [] Will not occur [X |] | | | | |
| 10.4 | Conditio | ons To Avoid: | No data available. | | | | | |
| 10.5 | - | - | s strong oxidizing agents | | | | | |
| | To Avoid: | | | | | | | |
| 10.6 | Hazardous | | carbon dioxide | | | | | |
| | = | osition or | carbon monoxide | | | | | |
| | Byprodu | icts: | | | | | | |
| | | | Section 11. Toxicolog | ical Informa | ation | | | |
| 11.1 | Informat | | The toxicological effects of this prod | uct have not beer | n thoroughly st | udied. | | |
| | Toxicolo | gical Effects: | | | | | | |
| CAS # | # | Hazardous Com | ponents (Chemical Name) | NTP | IARC | ACGIH | OSHA | |
| | | · | | | | | | |
| 3724 | 90-74-9 | 1,3-Dinonadecan | · · · · · · · | n.a. | n.a. | n.a. | n.a. | |
| 3724 | 90-74-9 | | · · · · · · · | | | n.a. | n.a. | |
| 3724 12.1 | 90-74-9 Toxicity: | 1,3-Dinonadecan | oyl-rac-glycerol | | | n.a. | n.a. | |
| | | 1,3-Dinonadecan | oyl-rac-glycerol Section 12. Ecologic | al Informat | ion | n.a. | n.a. | |
| | | 1,3-Dinonadecan | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. | al Informat | ion | n.a. | n.a. | |
| 12.1 | Toxicity: | 1,3-Dinonadecand | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w | al Informat | ion | n.a. | n.a. | |
| 12.1 | Toxicity: Persiste | 1,3-Dinonadecano nce and bility: | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w | al Informat | ion | n.a. | n.a. | |
| 12.1 12.2 | Toxicity: Persiste Degrada | 1,3-Dinonadecand nce and bility: mulative | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w No data available. | al Informat | ion | n.a. | n.a. | |
| 12.1 12.2 | Toxicity: Persiste Degrada Bioaccu | 1,3-Dinonadecand nce and bility: mulative I: | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w No data available. | al Informat | ion | n.a. | n.a. | |
| 12.1 12.2 12.3 | Toxicity: Persiste Degrada Bioaccu Potentia Mobility | 1,3-Dinonadecand nce and bility: mulative I: in Soil: | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. | al Informat | ion | n.a. | n.a. | |
| 12.1 12.2 12.3 12.4 | Toxicity: Persiste Degrada Bioaccu Potentia Mobility | 1,3-Dinonadecan nce and bility: mulative I: in Soil: of PBT and vPvB | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. | al Informat | ion | n.a. | n.a. | |
| 12.1 12.2 12.3 12.4 | Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm | 1,3-Dinonadecan nce and bility: mulative I: in Soil: of PBT and vPvB | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. | al Informat | ion | n.a. | n.a. | |
| 12.1 12.2 12.3 12.4 12.5 | Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm | 1,3-Dinonadecand nce and bility: mulative I: in Soil: of PBT and vPvB nent: | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. No data available. No data available. | ater may cause p | I ollution. | n.a. | n.a. | |
| 12.1 12.2 12.3 12.4 12.5 | Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad | 1,3-Dinonadecand nce and bility: mulative I: in Soil: of PBT and vPvB nent: | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. No data available. No data available. Section 13. Disposal | al Informat ater may cause pr Considerat | ion ollution. | n.a. | n.a. | |
| 12.1 12.2 12.3 12.4 12.5 12.6 | Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad | 1,3-Dinonadecand nce and bility: mulative l: in Soil: of PBT and vPvB nent: lverse effects: | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. No data available. No data available. Section 13. Disposal | ater may cause provide the second sec | ion ollution. ions egulations. | n.a. | n.a. | |
| 12.1 12.2 12.3 12.4 12.5 12.6 | Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad | 1,3-Dinonadecand nce and bility: mulative l: in Soil: of PBT and vPvB nent: lverse effects: | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w No data available. No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo | ater may cause provide the second sec | ion ollution. ions egulations. | n.a. | n.a. | |
| 12.1 12.2 12.3 12.4 12.5 12.6 13.1 14.1 | Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad Waste D | 1,3-Dinonadecand nce and bility: mulative I: in Soil: of PBT and vPvB hent: Iverse effects: isposal Method: RANSPORT (US I | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo | ater may cause provide the second sec | ion ollution. ions egulations. | n.a. | n.a. | |
| 12.1 12.2 12.3 12.4 12.5 12.6 13.1 14.1 D | Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad Waste D | 1,3-Dinonadecand ince and bility: mulative I: in Soil: of PBT and vPvB hent: Iverse effects: isposal Method: RANSPORT (US I r Shipping Name: | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo | ater may cause provide the second sec | ion ollution. ions egulations. | n.a. | n.a. | |
| 12.1 12.2 12.3 12.4 12.5 12.6 13.1 14.1 D | Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T | 1,3-Dinonadecand nce and bility: mulative l: in Soil: of PBT and vPvB nent: lverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo | ater may cause provide the second sec | ion ollution. ions egulations. | n.a. | n.a. | |
| 12.1 12.2 12.3 12.4 12.5 12.6 13.1 14.1 D | Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T OT Prope | 1,3-Dinonadecand nce and bility: mulative l: in Soil: of PBT and vPvB nent: lverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo | ater may cause provide the second sec | ion ollution. ions egulations. | n.a. | n.a. | |
| 12.1 12.2 12.3 12.4 12.5 12.6 13.1 14.1 D(U) 14.1 | Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T OT Prope OT Hazard | 1,3-Dinonadecand ince and bility: mulative I: in Soil: of PBT and vPvB hent: Iverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: hber: | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo | ater may cause provide the second sec | ion ollution. ions egulations. | n.a. | n.a. | |
| 12.1 12.2 12.3 12.4 12.5 12.6 13.1 14.1 D ⁰ UI 14.1 A | Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T OT Prope OT Hazard | 1,3-Dinonadecand 1,3-Dinonadecand ince and bility: mulative I: in Soil: of PBT and vPvB nent: lverse effects: isposal Method: RANSPORT (US I r Shipping Name: nber: RANSPORT (Euro hipping Name: | oyl-rac-glycerol Section 12. Ecologic Avoid release into the environment. Runoff from fire control or dilution w No data available. Dispose in accordance with local, st Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo DOT): Not dangerous goods. | ater may cause provide the second sec | ion ollution. ions egulations. | n.a. | n.a. | |



 14.3 AIR TRANSPORT (ICAO/IATA):

 ICAO/IATA Shipping Name:
 Not dangerous goods.

 Additional Transport
 Transport in accordance with local, state, and federal regulations.

 Information:
 Information:

Section 15. Regulatory Information

| | | nents and Reauthorization Act of | - | 1 | 1 | |
|---|---------------------------------|--|---|-----------|--------------|--|
| CAS # Hazardous Com | | ponents (Chemical Name) | S. 302 (EHS) | S. 304 RQ | S. 313 (TRI) | |
| 372490-74-9 | 1,3-Dinonadecanoyl-rac-glycerol | | No | No | No | |
| CAS # | Hazardous Com | ponents (Chemical Name) | Other US EPA or State Lists | | | |
| 372490-74-9 | 1,3-Dinonadecanoyl-rac-glycerol | | CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No | | | |
| Regulatory Information Statement: | | This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008. | | | | |
| | | Section 16. Oth | ner Information | า | | |
| Revision Date: | | 03/07/2019 | | | | |
| Additional Information About This Product: | | No data available. | | | | |
| Company Polic | cy 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. | | | | |