

Revision: 10/22/2019

|            |   | accord   | ing to Regulation (EC) No. 1907/2006 as a  | amended by (EC) No. 2015  | 5/830 and US OSHA HCS   | 2015   |  |  |  |
|------------|---|--|--|---|---|--|--|--|--|
|            |   | Section 1.   | Identification of the Substar  | nce/Mixture and o   | f the Company/Ur  | ndertaking                                       |  |  |  |
| 1.1        | Product Code:26937Product Name:1,3-Dinervonoyl-rac-glycerolSynonyms:15Z,15'Z)-15-tetracosenoic acid, 1,1'-(2-hydroxy-1,3-propanediyl) ester; DG(24:1/0:0/24:1);1,3-Dinervonin; 1,3-Di-15(Z)-Tetracosenoin; 1,3-Di-15(Z)-Tetracosenoyl-rac-glycerol; |  |  |   |   |  |  |  |  |
| 1.2        | Releva  | nt identified uses o   | of the substance or mixture a  | and uses advised a  | against:  |  |  |  |  |
|            | Relev   | ant identified uses  | s: For research use only, n  | ot for human or vet   | erinary use.  |  |  |  |  |
| 1.3        | Details of the Supplier of the Safety Data Sheet:   |  |  |   |   |  |  |  |  |
|            | Company Name:Cayman Chemical Company1180 E. Ellsworth Rd.Ann Arbor, MI 48108  |  |  |   |   |  |  |  |  |
|            | Web s   | site address:  | www.caymanchem.com   | www.caymanchem.com  |   |  |  |  |  |
|            | Inform  | nation:  | Cayman Chemical Comp   | bany  | +1 (734   | 4)971-3335                                       |  |  |  |
| 1.4        | -   | ency telephone nu<br>gency Contact:  | mber:<br>CHEMTREC Within USA<br>CHEMTREC Outside US  |   |   | 0)424-9300<br>3)527-3887                         |  |  |  |
|            |   |  | Section 2. Ha  | zards Identif   | ication   |  |  |  |  |
| 2.1        | Classifi  | ication of the Subs  | stance or Mixture:   |   |   |  |  |  |  |
| 2.2        | Label E   | lements:   |  |   |   |  |  |  |  |
| 2.3        | GHS<br>Based<br>GHS<br>No ph<br>GHS<br>O ph<br>GHS<br>Pleas<br>Advers   | Precautionary Phr<br>arases apply.<br>Response Phrases<br>arases apply.<br>Storage and Dispo<br>e refer to Section 7<br>se Human Health<br>a and Symptoms: | s:<br>osal Phrases:<br>for Storage and Section 13 for<br>Material may be irritating to t<br>May be harmful by inhalatior<br>May cause eye, skin, or resp | Disposal information<br>he mucous membra<br>n, ingestion, or skin<br>niratory system irrita<br>e, the toxicological p | on.<br>anes and upper res<br>absorption.<br>ttion.<br>properties have not | piratory tract.<br>been thoroughly investigated. |  |  |  |
| CAS        | #/  | 1  | ponents (Chemical Name)/   | Concentration   | EC No./   | GHS Classification                               |  |  |  |
|            | CS #  | REACH Registration No.   |  |   | EC Index No.  |  |  |  |  |
| 9605<br>NA | 94-30-3   | 1,3-Dinervonoyl-rac-glycerol   |  | 100.0 %   | NA<br>NA  | No data available.                               |  |  |  |
|            |   |  |  |   |   |  |  |  |  |

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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.<br>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.<br>Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.<br>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. |  |  |  |  |
|  | In Case of Eye Contact:  |   |  |  |  |  |
|  | In Case of Ingestion:  |   |  |  |  |  |
|  |  | 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<br>Media:   | g 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,  | Avoid raising and breathing dust, and provide adequate ventilation.   |  |  |  |  |
|  | Protective Equipment an  | 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  | Take steps to avoid release into the environment, if safe to do so.   |  |  |  |  |
|  | Precautions:   |   |  |  |  |  |
| 6.3  |  | r Contain spill and collect, as appropriate.  |  |  |  |  |
|  | Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations. |   |  |  |  |  |
|  | Up:  |   |  |  |  |  |
|  |  | Section 7. Handling and Storage   |  |  |  |  |
| 7.1  | Precautions To Be Taker  | n Avoid breathing dust/fume/gas/mist/vapours/spray.   |  |  |  |  |
|  | in Handling:   | Avoid prolonged or repeated exposure.   |  |  |  |  |
| 7.2  | Precautions To Be Taker  | n 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.  |  |  |  |  |

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|  | (Ventilation etc.):                                     |   |  |  |  |  |  |
|--|---|---|--|--|--|--|--|
| 8.2.2  |   |   |  |  |  |  |  |
|  | Eye Protection:   | Safety glasses  |  |  |  |  |  |
|  | Protective Gloves: 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.         |   |  |  |  |  |  |
|  | ce Practices:   | Facilities storing or utilizing this material should be equipped with an eyewash and a safety showe |  |  |  |  |  |
|  |   | Wash thoroughly after handling.   |  |  |  |  |  |
|  |   | No data available.  |  |  |  |  |  |
|  | S   | ection 9. Physical and Chemical Properties  |  |  |  |  |  |
| 9.1  | Information on Basic Phy                                | sical 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 o                               | or mm No data.  |  |  |  |  |  |
|  | Hg):  |   |  |  |  |  |  |
|  | Vapor Density (vs. Air = 1                              | I): No data.  |  |  |  |  |  |
|  | Specific Gravity (Water =                               | 1): No data.  |  |  |  |  |  |
|  | Solubility in Water:                                    | No data.  |  |  |  |  |  |
|  | Solubility Notes:                                       | ~0.5 mg/ml in a 1:1 solution of EtOH:PBS (pH 7.2); ~10 mg/ml in EtOH & DMF;                         |  |  |  |  |  |
|  | Octanol/Water Partition                                 | No data.  |  |  |  |  |  |
|  | Coefficient:  |   |  |  |  |  |  |
|  | Autoignition Pt:  | No data.  |  |  |  |  |  |
|  | Decomposition Tempera                                   |   |  |  |  |  |  |
|  | Viscosity:  | No data.  |  |  |  |  |  |
| 9.2  | Other Information                                       |   |  |  |  |  |  |
|  | Percent Volatile:                                       | No data.  |  |  |  |  |  |
|  | Molecular Formula & We                                  | ight: C51H96O5 789.3  |  |  |  |  |  |
|  |   | Section 10. Stability and Reactivity  |  |  |  |  |  |
| 10.1   | Reactivity: No data available.                          |   |  |  |  |  |  |
| 10.2   | Stability:  | Unstable [ ] Stable [ X ]   |  |  |  |  |  |
| <b>10.3</b> Stability Note(s): Stable if stored in accordance with information listed on the product insert. |   |   |  |  |  |  |  |
|  | Polymerization:   | Will occur [ ] Will not occur [ X ]   |  |  |  |  |  |
| 10.4   | Conditions To Avoid:                                    | No data available.  |  |  |  |  |  |
| 10.5   |   |   |  |  |  |  |  |
|  | To Avoid:   |   |  |  |  |  |  |
| 10.6   | Hazardous   | No data available.  |  |  |  |  |  |
| I  |   |   |  |  |  |  |  |
|  |   | Multi-region form   |  |  |  |  |  |



|  | Decomposition or    |                   |   |                    |                |            |        |         |  |
|--|---------------------|-------------------|---|--------------------|----------------|------------|--------|---------|--|
|  | Byprodu             | ucts:             |   |                    |                |            |        |         |  |
|  |                     |                   | Section 11. Toxico  | logical Info       | ormation       | Ì          |        |         |  |
| 11.1   | Informa             | tion on           | The toxicological effects of this                               | product have no    | t been thoro   | ughly stud | died.  |         |  |
|  | Toxicolo            | ogical Effects:   |   |                    |                |            |        |         |  |
| CAS  | ŧ                   | Hazardous Com     | nponents (Chemical Name)  |                    | P  /           | ARC        | ACGIH  | OSHA    |  |
| 9605   | 94-30-3             | 1,3-Dinervonoyl-r | ac-glycerol   | n.a.               | . n            | .a.        | n.a.   | n.a.    |  |
|  |                     |                   | Section 12. Ecolo   | ogical Infor       | mation         |            |        |         |  |
| 12.1   | Toxicity:           |                   | Avoid release into the environment.                             |                    |                |            |        |         |  |
|  |                     |                   | Runoff from fire control or dilution water may cause pollution. |                    |                |            |        |         |  |
| 12.2   | Persiste            | nce and           | No data available.  |                    |                |            |        |         |  |
|  | Degrada             | ıbility:          |   |                    |                |            |        |         |  |
| 12.3   | Bioaccu             | mulative          | No data available.  |                    |                |            |        |         |  |
|  | Potentia            | ıl:               |   |                    |                |            |        |         |  |
| 12.4   | Mobility            | in Soil:          | No data available.  |                    |                |            |        |         |  |
| 12.5   | Results             | of PBT and vPvB   | No data available.  |                    |                |            |        |         |  |
|  | assessn             | nent:             |   |                    |                |            |        |         |  |
| 12.6   | Other ad            | lverse effects:   | No data available.  |                    |                |            |        |         |  |
|  |                     |                   | Section 13. Dispo   | sal Conside        | erations       |            |        |         |  |
| 13.1   | Waste D             | isposal Method:   | Dispose in accordance with loc                                  | al, state, and fed | leral regulati | ons.       |        |         |  |
|  |                     |                   | Section 14. Trar  | sport Infor        | mation         |            |        |         |  |
| 14.1   | LAND T              | RANSPORT (US D    | OT):  | •                  |                |            |        |         |  |
| D  | OT Prope            | r Shipping Name:  | Not dangerous goods.  |                    |                |            |        |         |  |
|  | DOT Hazard Class:   |                   |   |                    |                |            |        |         |  |
| U  | N/NA Nun            | nber:             |   |                    |                |            |        |         |  |
| 14.1   | LAND T              | RANSPORT (Euro    | pean ADR/RID):  |                    |                |            |        |         |  |
| A  |                     | hipping Name:     | Not dangerous goods.  |                    |                |            |        |         |  |
|  | N Number            |                   |   |                    |                |            |        |         |  |
| На   | azard Cla           | SS:               |   |                    |                |            |        |         |  |
| 14.3   |                     | ANSPORT (ICAO/I   | ATA):   |                    |                |            |        |         |  |
|  |                     | Shipping Name:    | Not dangerous goods.  |                    |                |            |        |         |  |
|  | N Numbe             |                   |   | Packing            | Group:         |            |        |         |  |
| Hazard Class:  |                     |                   |   |                    |                |            |        |         |  |
| Additional Transport Transport in accordance with local, state, and federal regulations. |                     |                   |   |                    |                |            |        |         |  |
| Inforr   | nation:             | -                 |   |                    |                |            |        |         |  |
|  |                     |                   | Section 15. Regu  | latory Infor       | mation         |            |        |         |  |
| EPA S  | SARA (Su            | perfund Amendm    | ents and Reauthorization Act                                    | •                  |                |            |        |         |  |
| CAS  | •                   |                   | ponents (Chemical Name)   | S. 302 (EHS)       | S. 30          | 4 RQ       | S. 313 | 3 (TRI) |  |
| 9605   | 94-30-3             | 1,3-Dinervonoyl-r | ac-glycerol   | No                 | No             |            | No     |         |  |
| ļ  |                     | 1                 |   | -                  | I              |            | Į      |         |  |
|  |                     |                   |   |                    |                |            |        |         |  |
|  |                     |                   |   |                    |                |            |        |         |  |
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| CAS #                         | Hazardous Components (Chemical Name) |  | Other US EPA or State Lists                                 |  |  |
|-------------------------------|--------------------------------------|--|---|--|--|
| 960594-30-3                   | 1,3-Dinervonoyl-                     | rac-glycerol   | CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA<br>PROP.65: No |  |  |
| Regulatory Info<br>Statement: | ormation                             | This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.  |   |  |  |
|                               |                                      | Section 16. Oth  | ner Information   |  |  |
| Revision Date:                |                                      | 10/22/2019   |   |  |  |
| Additional Info               | rmation About                        | No data available.   |   |  |  |
| 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. |   |  |  |