

| | | LDL Receptor Blo | | | Revision: 0 | | | | | |
|--|--|--|--|--|---|-----------|--|--|--|--|
| - CHIMI | C A 1 | | | | Supersedes Revision: 0 | 6/17/2007 | | | | |
| | accord | ling to Regulation (EC) No. 1907/2006 as a | mended by (EC) No | o. 1272/200 | 08 | | | | | |
| | Section 1. Ide | entification of the Substance/Mixtur | e and of the Co | mpany/U | ndertaking | | | | | |
| 1.1 Pro | duct Code: | 10007672 | | | | | | | | |
| | duct Name: | LDL Receptor Blocking Peptide | | | | | | | | |
| Syn | Donyms: LDLR Blocking Peptide; Low-density Lipoprotein Receptor Blocking peptide; | | | | | | | | | |
| 1.2 Rele | Relevant identified uses of the substance or mixture and uses advised against: | | | | | | | | | |
| Re | elevant identified uses: | For research use only, not for huma | an or veterinary us | se. | | | | | | |
| 1.3 Deta | ails of the Supplier of the | Safety Data Sheet: | | | | | | | | |
| Co | ompany Name: | Cayman Chemical Company 1180 E. Ellsworth Rd. Ann Arbor, MI 48108 | | | | | | | | |
| W | eb site address: | www.caymanchem.com | | | | | | | | |
| | formation: | Cayman Chemical Company | | +1 (73- | 4)971-3335 | | | | | |
| | ergency telephone numb | | | | ., | | | | | |
| | nergency Contact: | CHEMTREC Within USA and Cana | da. | +1 (80 | 0)424-9300 | | | | | |
| | norgeney contacti | CHEMTREC Outside USA and Car | | | 3)527-3887 | | | | | |
| | | Section 2. Hazards l | | - | , | | | | | |
| 2.2 Lab | el Elements: | Regulation (EC) No 1272/2008 [CLP |]: | | | | | | | |
| 2.2 Lab 2.2.1 Lak GI Ba G No G No G PI 2.3 Adv | el Elements: beling according to Regu HS Signal Word: HS Hazard Phrases: ased on evaluation of curre HS Precaution Phrases: o phrases apply. HS Response Phrases: o phrases apply. HS Storage and Disposa lease refer to Section 7 for verse Human Health M ects and Symptoms: M | lation (EC) No 1272/2008 [CLP]: None ently available data this substance or r | nixture is not clas nformation. membranes and , or skin absorptio tem irritation. | l upper res on. | spiratory tract. | estigated | | | | |
| 2.2 Lab 2.2.1 Lak GI Ba G No G No G Pl 2.3 Adv | el Elements: beling according to Regu HS Signal Word: HS Hazard Phrases: ased on evaluation of curre HS Precaution Phrases: o phrases apply. HS Response Phrases: o phrases apply. HS Storage and Disposa lease refer to Section 7 for verse Human Health Mects and Symptoms: M | Iation (EC) No 1272/2008 [CLP]: None ently available data this substance or r I Phrases: Storage and Section 13 for Disposal i laterial may be irritating to the mucous lay be harmful by inhalation, ingestion lay cause eye, skin, or respiratory sys | nixture is not clas nformation. membranes and , or skin absorptio tem irritation. blogical properties | l upper res on. s have not | spiratory tract. t been thoroughly inve | estigated | | | | |
| 2.2 Lab 2.2.1 Lak GI Ba G No G No C Q PI 2.3 Adv | el Elements: peling according to Regu HS Signal Word: HS Hazard Phrases: ased on evaluation of curre HS Precaution Phrases: o phrases apply. HS Response Phrases: o phrases apply. HS Storage and Disposa lease refer to Section 7 for verse Human Health M ects and Symptoms: M M T Sectio | Iation (EC) No 1272/2008 [CLP]: None ently available data this substance or r I Phrases: Storage and Section 13 for Disposal i laterial may be irritating to the mucous lay be harmful by inhalation, ingestion lay cause eye, skin, or respiratory sys o the best of our knowledge, the toxic n 3. Composition/Inform tents (Chemical Name)/ | nixture is not clas nformation. membranes and , or skin absorption tem irritation. blogical properties nation on In ration EC No | l upper res on. s have not gredie | spiratory tract. t been thoroughly inve | | | | | |
| 2.2 Lab 2.2.1 Lak GI G Ba G G N G CAS # / Effe CAS # / RTECS # | el Elements: beling according to Regu HS Signal Word: HS Hazard Phrases: ased on evaluation of currer HS Precaution Phrases: o phrases apply. HS Response Phrases: o phrases apply. HS Storage and Disposa lease refer to Section 7 for verse Human Health M ects and Symptoms: M T Sectio Hazardous Compor | Iation (EC) No 1272/2008 [CLP]: None ently available data this substance or r I Phrases: Storage and Section 13 for Disposal i laterial may be irritating to the mucous lay be harmful by inhalation, ingestion lay cause eye, skin, or respiratory sys o the best of our knowledge, the toxic n 3. Composition/Inform tents (Chemical Name)/ n No. | nixture is not clas nformation. membranes and , or skin absorption tem irritation. blogical properties nation on In ration EC No EC In | I upper res on. s have not gredie o./ | spiratory tract. t been thoroughly inve nts | | | | | |
| 2.2 Lab 2.2.1 Lat G G Ba G N G N CAS # / | el Elements: beling according to Regu HS Signal Word: HS Hazard Phrases: ased on evaluation of curre HS Precaution Phrases: o phrases apply. HS Response Phrases: o phrases apply. HS Storage and Disposa lease refer to Section 7 for verse Human Health M ects and Symptoms: M T Sectio Hazardous Compor REACH Registration LDL Receptor Blocking Bovine Serum Albumin | Iation (EC) No 1272/2008 [CLP]: None ently available data this substance or r I Phrases: Storage and Section 13 for Disposal i laterial may be irritating to the mucous lay be harmful by inhalation, ingestion lay cause eye, skin, or respiratory sys o the best of our knowledge, the toxic n 3. Composition/Inform tents (Chemical Name)/ Peptide 0.0 -0.1 S | nixture is not clas nformation. membranes and , or skin absorption tem irritation. blogical properties nation on In ration EC No EC In % NA | l upper res on. s have not gredie o./ udex No. | spiratory tract. t been thoroughly inve nts GHS Classificatior | 1 | | | | |

Multi-region format



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|-----|------------------------|---|---|-----------------------|----------------------|--|--|--|
| - | 7-14-5 25000 | Sodium chloride | | 0.8 % | 231-598-3 NA | No data available. | | |
| | -86-1 00000 | Trizma base | | 0.3 % | 201-064-4 NA | Skin Corr. 2: H315 Eye Damage 2: H319 STOT (SE) 3: H335 H336 | | |
| | 2-18-5 10000 | Water | | 98.68 -98.78 % | 231-791-2 NA | No data available. | | |
| | | • | | ł | • | _1 | | |
| | | | Section 4. Fi | rst Aid Meas | ures | | | |
| 4.1 | Descrip | otion of First Aid | No data available. | | | | | |
| | Measur | es: | | | | | | |
| | In Case of Inhalation: | | Remove to fresh air. If not bree Get immediate medical attent | | al respiration or g | ive oxygen by trained personnel. | | |
| | In Case | of Skin Contact: | Immediately wash skin with s clothing. Get medical attentio | | | 5 minutes. Remove contaminated before reuse. | | |
| | In Case | of Eye Contact: | Hold eyelids apart and flush e and tested by medical person | | vater for at least | 15 minutes. Have eyes examined | | |
| | 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 Me | asures | | | |
| 5.1 | Suitable | e Extinguishing | Use alcohol-resistant foam, o | carbon dioxide, wate | er, or dry chemica | al spray. | | |
| | Media: | | Use water spray to cool fire-e | exposed containers. | | | | |
| | Unsuita Media: | able Extinguishing | A solid water stream may be | inefficient. | | | | |
| 5.2 | Flamma | able Properties an | d No data available. | | | | | |
| | Hazard | s: | | | | | | |
| | Flash P | 't: | No data. | | | | | |
| | - | ive Limits: | LEL: No data. | UEL: No d | ata. | | | |
| | Autoigr | nition Pt: | No data. | | | | | |
| 5.3 | Fire Fig | hting Instructions | : As in any fire, wear self-conta equivalent), and full protectiv | ÷ | - | | | |
| | | | Section 6. Accider | tal Release | Measures | | | |
| 6.1 | Protect | ive Precautions, ive Equipment and ency Procedures: | | a NIOSH approved | self-contained br | reathing apparatus, or respirator, s, and heavy rubber gloves). | | |
| 6.2 | Enviror Precaut | nmental tions: | Take steps to avoid release | into the environmer | nt, if safe to do so | | | |
| 6.3 | Method | ls and Material Fo | r Contain spill and collect, as | appropriate. | | | | |
| | Contair | nment and Cleanin | gTransfer to a chemical waste | e container for dispo | osal in accordanc | e with local regulations. | | |
| | Up: | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |



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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.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

| CAS # | Partial Chemical Name | Britain EH40 | France VL | Europe | |
|--------------------------------------|-------------------------------|---|-----------------------------------|-----------------------------------|--|
| NA | LDL Receptor Blocking Peptide | No data. | No data. | No data. | |
| 9048-46-8 Bovine Serum Albumin (BSA) | | No data. | No data. | No data. | |
| 26628-22-8 Sodium azide | | TWA: 0.1 mg/m3 () STEL: 0.3 mg/m3 () | TWA: 0.1 mg/m3 STEL: 0.3 mg/m3 | TWA: 0.1 mg/m3 STEL: 0.3 mg/m3 | |
| 7647-14-5 Sodium chloride | | No data. | No data. | No data. | |
| 77-86-1 Trizma base | | No data. | No data. | No data. | |
| 7732-18-5 Water | | No data. | No data. | No data. | |
| CAS # | Partial Chemical Name | OSHA TWA | ACGIH TWA | Other Limits | |
| NA | LDL Receptor Blocking Peptide | No data. | No data. | No data. | |
| 9048-46-8 Bovine Serum Albumin (BSA) | | No data. | No data. | No data. | |
| 26628-22-8 Sodium azide | | No data. | CEIL: 0.29 mg/m3 | No data. | |
| 7647-14-5 Sodium chloride | | No data. | No data. | No data. | |
| 77-86-1 | Trizma base | No data. | No data. | No data. | |
| 7732-18-5 Water | | No data. | No data. | No data. | |

8.2 Exposure Controls:

 8.2.1 Engineering Controls
 Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne

 (Ventilation etc.):
 levels below recommended exposure limits.

8.2.2 Personal protection equipment:

Eye Protection:Safety glassesProtective Gloves:Compatible chemical-resistant glovesOther Protective Clothing:
Lab coatNIOSH approved respirator, as conditions warrant.Respiratory EquipmentNIOSH approved respirator, as conditions warrant.(Specify Type):Do not take internally.Work/Hygienic/MaintenanDo not take internally.Respiratores:Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower.
Wash thoroughly after handling.
No data available.



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| .1 | Informat | ion on Basic Physical | | Physical and (emical Properties | | • | | |
|--|---|--|--|--|--|---|-----------------------------|--------------|
| | | I States: | []0 | - |] Solid | | | |
| | - | ance and Odor: | Solut | | | | | |
| | pH: | | 7.4 | | | | | |
| | Melting | Point: | No d | ata. | | | | |
| | Boiling | | No d | ata. | | | | |
| | Flash Pt | : | No d | ata. | | | | |
| | Evapora | tion Rate: | No d | ata. | | | | |
| | Explosiv | ve Limits: | LEL: | No data. | UEL: No | data. | | |
| | Vapor P | ressure (vs. Air or mm | No d | ata. | | | | |
| | Hg): | | | | | | | |
| | Vapor D | ensity (vs. Air = 1): | No d | ata. | | | | |
| | Specific | Gravity (Water = 1): | No d | ata. | | | | |
| | Solubili | ty in Water: | No d | ata. | | | | |
| | Autoign | ition Pt: | No d | ata. | | | | |
| 9.2 | Other Inf | ormation | | | | | | |
| | Percent | Volatile: | No d | ata. | | | | |
| | | | Secti | on 10. Stability | and Reactiv | vitv | | |
| 0.1 | Reactivi | | lata avai | | | vity | | |
| 0.2 | Stability | | table [| | | | | |
| 0.3 | - | | - | red in accordance with | information listed o | on the product | insert | |
| 0.0 | - | | | | moort. | | | |
| | Polyme | vization: Will | 1 Will not occur [X | 1 | | | | |
| 10 / | • | | occur [| | [] | | | |
| | Conditio | ons To Avoid: No o | lata avai | ilable. | | | | |
| | Conditio | ons To Avoid: No c atibility - Materials No c | lata avai | ilable. |] | | | |
| 10.5 | Conditio Incompa To Avoi | ons To Avoid: No c atibility - Materials No c d: | lata avai lata avai | ilable. ilable. |] | | | |
| 10.5 | Conditio Incompa To Avoi Hazardo | ons To Avoid: No o atibility - Materials No o d: ous No o | lata avai | ilable. ilable. |] | | | |
| 0.5 | Conditio Incompa To Avoi Hazardo Decomp | ons To Avoid: No d atibility - Materials No d d: ous No d position Or | lata avai lata avai | ilable. ilable. | .] | | | |
| 0.5 | Conditio Incompa To Avoi Hazardo | ons To Avoid: No d atibility - Materials No d d: ous No d position Or ucts: | lata ava lata ava lata ava | ilable. ilable. ilable. | - | 4: | | |
| 10.5 | Condition Incompa To Avoin Hazardo Decomp Byprode | ons To Avoid: No o atibility - Materials No o d: ous No o position Or ucts: | lata ava lata ava lata ava lata ava | ilable. ilable. ilable. n 11. Toxicoloç | gical Informa | | | |
| 10.5 | Condition Incompa To Avoi Hazardo Decomp Byprodu | ons To Avoid: No of atibility - Materials No of d: No of bus No of bosition Or ucts: Stion on The | lata ava lata ava lata ava lata ava | ilable. ilable. ilable. | gical Informa | | udied. | |
| 0.5 | Condition Incompa To Avoid Hazardo Decomp Byprodu Informa Toxicolo | ons To Avoid: No of atibility - Materials No of d: No of position Or acts: Stion on The ogical Effects: | lata avai lata avai lata avai lata avai Sectio toxicolo | ilable. ilable. ilable. <u>n 11. Toxicoloç</u> gical effects of this prod | gical Informa | thoroughly st | udied. | |
| 0.5 | Condition Incompa To Avoi Hazardo Decomp Byprodu | ons To Avoid: No of atibility - Materials No of d: No of position Or ucts: tion on The ogical Effects: y: NTP | data avai data avai data avai data avai data avai data avai data avai data avai data avai data avai | ilable. ilable. ilable. gical effects of this proc IARC Monographs? | gical Informa duct have not been No OSHA Re | thoroughly st | | |
| 10.5 10.6 11.1 Carcii | Condition Incompa To Avoi Hazardo Decomp Byprodu Informa Toxicolo nogenicit | ons To Avoid: No of atibility - Materials No of d: No of position Or acts: Stion on The ogical Effects: | data avai data avai data avai data avai data avai data avai data avai data avai data avai data avai | ilable. ilable. ilable. gical effects of this proc IARC Monographs? | gical Informa | thoroughly st | udied. | OSHA |
| 10.5 10.6 11.1 Carcii | Condition Incompa To Avoi Hazardo Decomp Byprodu Informa Toxicolo nogenicit | ons To Avoid: No of atibility - Materials No of d: No of position Or ucts: tion on The ogical Effects: y: NTP | data avai data a | ilable. ilable. ilable. ilable. gical effects of this proc IARC Monographs? emical Name) | gical Informa duct have not been No OSHA Re | thoroughly st | | OSHA n.a. |
| 10.5 10.6 11.1 Carcin | Condition Incompart To Avoi Hazardo Decomp Byprodu Informa Toxicolo nogenicity | ons To Avoid: No of atibility - Materials No of atibility - Materials No of a second s | data avai data a | ilable. ilable. ilable. ilable. gical effects of this proc IARC Monographs? emical Name) | gical Informa duct have not been No OSHA Re | egulated? No | ACGIH | |
| 10.5 10.6 11.1 Carcii CAS | Condition Incompa To Avoin Hazardo Decomp Byprodu Informa Toxicolo nogenicity # NA | ons To Avoid: No d atibility - Materials No d d: No d oosition Or ucts: tion on The ogical Effects: y: NTF Hazardous Compone LDL Receptor Blocking | data avai data a | ilable. ilable. ilable. ilable. gical effects of this proc IARC Monographs? emical Name) | gical Informa duct have not been No OSHA Re NTP n.a. | e thoroughly st egulated? No IARC n.a. | ACGIH n.a. | n.a. |
| 10.5 10.6 11.1 Carcin CAS 904 2662 | Condition Incompart To Avoin Hazardo Decomp Byprodu Informa Toxicolo nogenicity # NA 8-46-8 | ons To Avoid: No of atibility - Materials No of d: No of position Or ucts: tion on The ogical Effects: y: NTP Hazardous Compone LDL Receptor Blocking Bovine Serum Albumir | data avai data a | ilable. ilable. ilable. ilable. gical effects of this proc IARC Monographs? emical Name) | yical Informa duct have not been No OSHA Re NTP n.a. n.a. | e thoroughly st egulated? No IARC n.a. n.a. | ACGIH n.a. n.a. | n.a. n.a. |
| CAS 904 2662 764 | Condition Incomparation To Avoin Hazardo Decomp Byprodu Informa Toxicolo nogenicity # NA 8-46-8 28-22-8 | ons To Avoid: No d atibility - Materials No d d: No d ous No d oosition Or ucts: tion on The ogical Effects: y: NTP Hazardous Compone LDL Receptor Blocking Bovine Serum Albumir Sodium azide | data avai data a | ilable. ilable. ilable. ilable. gical effects of this proc IARC Monographs? emical Name) | gical Informa duct have not been No OSHA Re NTP n.a. n.a. n.a. | egulated? No IARC n.a. n.a. n.a. | ACGIH n.a. n.a. A4 | n.a. |



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| | | | Section 12. Ecolo | ogical Inform | ation | | | | |
|--------|---------------------|------------------------------------|------------------------------------|---------------------------------|--------------------------------|---------------------|--|--|--|
| 12.1 | Toxicity | | Avoid release into the environm | 0 | | | | | |
| 12.1 | TOXICITY | | Runoff from fire control or diluti | | e pollution. | | | | |
| 12.2 | Persiste | ence and | No data available. | , | | | | | |
| | Degrada | ability: | | | | | | | |
| 12.3 | Bioaccu | Imulative No data available. | | | | | | | |
| | Potentia | d: | | | | | | | |
| 12.4 | Mobility | in Soil: No data available. | | | | | | | |
| 12.5 | Results assessr | of PBT and vPvB No data available. | | | | | | | |
| 12.6 | | dverse effects: | No data available. | | | | | | |
| | | | Section 13. Dispo | sal Consider | ations | | | | |
| 13.1 | Waste D | Disposal Method: | Dispose in accordance with loc | al, state, and federa | al regulations. | | | | |
| | | | Section 14. Trar | sport Inform | ation | | | | |
| 14.1 | LAND 1 | RANSPORT (US I | DOT): | | | | | | |
| D | OT Prope | er Shipping Name: | Not dangerous goods. | | | | | | |
| | OT Hazar | | | | | | | | |
| _ | N/NA Nur | | | | | | | | |
| 14.1 | | RANSPORT (Euro | | | | | | | |
| | DR/RID S N Numbe | hipping Name: | Not dangerous goods. | | | | | | |
| - | azard Cla | | | | | | | | |
| 14.3 | | ANSPORT (ICAO/I | ATA): | | | | | | |
| | | Shipping Name: | Not dangerous goods. | | | | | | |
| | ional Tra | | Transport in accordance with le | ocal, state, and fede | eral regulations. | | | | |
| Inforr | mation: | | | | | | | | |
| | | | Section 15. Regu | latory Inform | ation | | | | |
| EPA S | SARA (Sı | uperfund Amendm | ents and Reauthorization Act | of 1986) Lists | | | | | |
| CAS | # | Hazardous Com | ponents (Chemical Name) | S. 302 (EHS) | S. 304 RQ | S. 313 (TRI) | | | |
| | NA | LDL Receptor Blo | ocking Peptide | No | No | No | | | |
| 904 | 8-46-8 | Bovine Serum All | oumin (BSA) | No | No | No | | | |
| 2662 | 28-22-8 | Sodium azide | | Yes 500 LB | Yes 1000 LB | Yes | | | |
| 764 | 7-14-5 | Sodium chloride | | No | No | No | | | |
| 77 | -86-1 | Trizma base | | No | No | Yes-Cat. N106 | | | |
| 773 | 2-18-5 | Water | | No | No | No | | | |
| CAS | # | Hazardous Com | ponents (Chemical Name) | Other US EPA o | r State Lists | | | | |
| | NA | LDL Receptor Blo | ocking Peptide | CAA HAP,ODC: PROP.65: No | No; CWA NPDES: I | No; TSCA: No; CA | | | |
| 904 | 8-46-8 | Bovine Serum All | oumin (BSA) | CAA HAP,ODC: Inventory; CA P | No; CWA NPDES: 1 ROP.65: No | No; TSCA: Yes - | | | |
| 2662 | 28-22-8 | Sodium azide | | CAA HAP,ODC: Inventory; CA P | No; CWA NPDES: I ROP.65: No | No; TSCA: Yes - | | | |
| 764 | 7-14-5 | Sodium chloride | | CAA HAP,ODC: | No; CWA NPDES: I | | | | |
| 1 | | | | | | Multi-region format | | | |



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|--------------------------------------|---------------|--|--|--|--|
| | | Inventory; CA PROP.65: No | | | |
| 77-86-1 | Trizma base | CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Yes - | | | |
| | | Inventory; CA PROP.65: No | | | |
| 7732-18-5 | Water | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - | | | |
| | | Inventory; 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. Other Information | | | |
| Revision Date: | | 04/05/2015 | | | |
| Additional Info | rmation About | No data available. | | | |
| This Product: | | | | | |
| 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 use. Users should make their own investigations to determine the suitability of the information for their particular purposes. | | | |