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| | | | ling to Regulation (EC) No. 1907/2006 as a | - | | | | |
|--|--|--|---|---|---|---|--|--|
| | | Section 1. | Identification of the Substar | nce/Mixture and of | f the Company/U | ndertaking | | |
| .1 | Product Co | ode: | 28848 | | | | | |
| | Product Na | duct Name: GFAP Polyclonal Antibody | | | | | | |
| | Synonyms: ALXDRD; Glial Fibrillary Acidic Protein; Intermediate Filament Protein; | | | | | | | |
| 1.2 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: | | | | | | | |
| | Company | y Name: | Cayman Chemical Comp | pany | | | | |
| | | | 1180 E. Ellsworth Rd. | | | | | |
| | | | Ann Arbor, MI 48108 | | | | | |
| | Informati | address: | www.caymanchem.com | 2021 | . 1 /70 | 4\074.0005 | | |
| | | | Cayman Chemical Comp | pany | +1 (73 | 4)971-3335 | | |
| 1.4 | - | y telephone nu | | | .4 (00 | 00 404 0000 | | |
| | Emerger | ncy Contact: | CHEMTREC Within USA CHEMTREC Outside US | | • |)0)424-9300)3)527-3887 | | |
| | | | | | | 5)521-5001 | | |
| | | | Section 2. Ha | zards identili | Ication | | | |
| 2.1 | | | stance or Mixture: | | | | | |
| 2.2 | Label Elen | nents: | | | | | | |
| | GHS Sig | nal Word: | None | | | | | |
| | GHS Haz | zard Phrases: | | | | | | |
| | Based or | n evaluation of d | currently available data this sub | stance or mixture is | s not classifiable ad | ccording to GHS. | | |
| | GHS Pre | cautionary Ph | rases: | | | | | |
| | No phras | ses apply. | | | | | | |
| | GHS Res | sponse Phrase | s: | | | | | |
| | No phras | ses apply. | | | | | | |
| | GHS Sto | orage and Disp | osal Phrases: | | | | | |
| | Please re | efer to Section 7 | for Storage and Section 13 for | r Disposal informati | | | | |
| | Adverse H | | | i Disposai intornatio | on. | | | |
| 2.3 | | Human Health | Material may be irritating to t | · | | spiratory tract. | | |
| 2.3 | Effects an | Human Health nd Symptoms: | Material may be irritating to t May be harmful by inhalatior | the mucous membra | anes and upper res | spiratory tract. | | |
| 2.3 | Effects an | | May be harmful by inhalation May cause eye, skin, or resp | the mucous membra n, ingestion, or skin piratory system irrita | anes and upper res absorption. tion. | | | |
| 2.3 | Effects an | | May be harmful by inhalation May cause eye, skin, or resp | the mucous membra n, ingestion, or skin piratory system irrita | anes and upper res absorption. tion. | spiratory tract. t been thoroughly investigated | | |
| 2.3 | Effects an | nd Symptoms: | May be harmful by inhalation May cause eye, skin, or resp | the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p | anes and upper res absorption. tion. properties have no | t been thoroughly investigated | | |
| | | nd Symptoms: Sec | May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge tion 3. Composition | the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p n/Information | anes and upper res absorption. tion. properties have no On Ingredie | t been thoroughly investigated | | |
| CAS | #/ H | nd Symptoms: Sec | May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge tion 3. Composition ponents (Chemical Name)/ | the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p | anes and upper res absorption. tion. properties have no | t been thoroughly investigated | | |
| CAS | #/ H CS# R | nd Symptoms: Sec azardous Com | May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge tion 3. Composition ponents (Chemical Name)/ ation No. | the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p n/Information | anes and upper res absorption. tion. properties have no On Ingredie EC No./ | t been thoroughly investigated | | |
| CAS RTE | #/ H CS# R | nd Symptoms: Sec lazardous Com EACH Registra | May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge tion 3. Composition ponents (Chemical Name)/ ation No. | the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p n/Information Concentration | anes and upper res absorption. tion. properties have no ON Ingredie EC No./ EC Index No. | t been thoroughly investigated | | |
| CAS RTE NA NA 56 | # / H CS # R G 5-81-5 G | Ad Symptoms: Sec azardous Com EACH Registra FAP Polyclonal A | May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge tion 3. Composition ponents (Chemical Name)/ ation No. | the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p n/Information Concentration | anes and upper res absorption. tion. properties have no ON Ingredie EC No./ EC Index No. NA | t been thoroughly investigated | | |
| CAS RTE NA NA 56 | # / H CS # R G 5-81-5 G | ad Symptoms: Sec azardous Com EACH Registra FAP Polyclonal A | May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge tion 3. Composition ponents (Chemical Name)/ ation No. | the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p n/Information Concentration 0.05 % | anes and upper res absorption. tion. oroperties have no On Ingredie EC No./ EC Index No. NA NA | t been thoroughly investigated NS GHS Classification No data available. | | |
| CAS RTE NA NA 56 MA80 266 | # / H CS # R G G S-81-5 G 050000 01 28-22-8 St | Ad Symptoms: Sec azardous Com EACH Registra FAP Polyclonal A lycerol 1-2119471987-18 odium azide | May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge stion 3. Composition ponents (Chemical Name)/ ation No. ntibody | the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p n/Information Concentration 0.05 % | anes and upper res absorption. tion. oroperties have no On Ingredie EC No./ EC Index No. NA NA 200-289-5 NA 247-852-1 | t been thoroughly investigated nts GHS Classification No data available. No GHS classifications appl Acute Tox.(O) 2: H300 | | |
| CAS RTE NA NA 56 MA80 266 | # / H CS # R G G 3-81-5 G 050000 01 28-22-8 Sr | Ad Symptoms: Sec azardous Com EACH Registra FAP Polyclonal A lycerol 1-2119471987-18 | May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge stion 3. Composition ponents (Chemical Name)/ ation No. ntibody | the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p n/Information 0.05 % 50.0 % | anes and upper res absorption. tion. oroperties have no On Ingredie EC No./ EC Index No. NA NA 200-289-5 NA | t been thoroughly investigated nts GHS Classification No data available. No GHS classifications appl Acute Tox.(O) 2: H300 Aquatic (A) 1: H400 | | |
| CAS RTE NA NA 56 MA80 266 VY80 | # / H CS # R G G 5-81-5 G 050000 01 28-22-8 So 150000 01 | Ad Symptoms: Sec azardous Com EACH Registra FAP Polyclonal A lycerol 1-2119471987-18 odium azide 1-2119457019-37 | May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge stion 3. Composition ponents (Chemical Name)/ ation No. ntibody | the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p n/Information 0.05 % 50.0 % 0.02 % | anes and upper res absorption. tion. oroperties have no On Ingredie EC No./ EC Index No. NA NA 200-289-5 NA 247-852-1 011-004-00-7 | t been thoroughly investigated nts GHS Classification No data available. No GHS classifications appl Acute Tox.(O) 2: H300 Aquatic (A) 1: H400 Aquatic (C) 1: H410 | | |
| CAS RTE NA NA 566 VY80 764 | # / H CS # R G G 3-81-5 G 050000 07 28-22-8 Si 050000 07 17-14-5 Si | Ad Symptoms: Sec azardous Com EACH Registra FAP Polyclonal A lycerol 1-2119471987-18 odium azide 1-2119457019-37 odium chloride | May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge stion 3. Composition ponents (Chemical Name)/ ation No. ntibody | the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p n/Information 0.05 % 50.0 % | anes and upper res absorption. tion. oroperties have no On Ingredie EC No./ EC Index No. NA 200-289-5 NA 247-852-1 011-004-00-7 231-598-3 | t been thoroughly investigated nts GHS Classification No data available. No GHS classifications appl Acute Tox.(O) 2: H300 Aquatic (A) 1: H400 | | |
| RTE NA NA 56 MA80 266 VY80 764 VZ47 | # / H CS # R G G 3-81-5 G 050000 0' 28-22-8 S 550000 0' 17-14-5 S 25000 0' | Ad Symptoms: Sec azardous Com EACH Registra FAP Polyclonal A lycerol 1-2119471987-18 odium azide 1-2119457019-37 | May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge stion 3. Composition ponents (Chemical Name)/ ation No. ntibody -0000 | the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p n/Information 0.05 % 50.0 % 0.02 % | anes and upper res absorption. tion. oroperties have no On Ingredie EC No./ EC Index No. NA NA 200-289-5 NA 247-852-1 011-004-00-7 | t been thoroughly investigated nts GHS Classification No data available. No GHS classifications appl Acute Tox.(O) 2: H300 Aquatic (A) 1: H400 Aquatic (C) 1: H410 | | |

Multi-region format



| | 58-79-4 500000 | Sodium phosphate, 01-2119489797-11 | Dibasic | 0.106 % | 231-448-7 NA | No data available. | | |
|---------------------------------------|--------------------------|--|--|--------------------------|-------------------|---|--|--|
| | 32-18-5 10000 | Water na | | 48.844 -48.944 % | 231-791-2 NA | No GHS classifications apply. | | |
| | | - | Section 4. Fi | rst Aid Measu | ires | ł | | |
| 4.1 | Descr | iption of First Aid | | | | | | |
| | Measu | ires: | | | | | | |
| | In Cas | e of Inhalation: | Remove to fresh air. If not br | eathing, give artificial | respiration or g | give oxygen by trained personnel. | | |
| | | | Get immediate medical atten | tion. | | | | |
| | In Case of Skin Contact: | | - | | | 15 minutes. Remove contaminated | | |
| | | | clothing. Get medical attention | | - | | | |
| | In Cas | e of Eye Contact: | | | ater for at least | 15 minutes. Have eyes examined | | |
| | In Cas | a of Insection. | and tested by medical person | | nacious Nover | aive envithing by mouth to on | | |
| | In Cas | e of Ingestion: | - | - | | give anything by mouth to an iting unless directed to do so by | | |
| | | | medical personnel. | | | ang amess anected to do so by | | |
| | | | Section 5. Fire | Fighting Mea | asures | | | |
| ـــــــــــــــــــــــــــــــــــــ | Suitab | le Extinguishing | Use alcohol-resistant foam, | | | al spray. | | |
| | Media | | Use water spray to cool fire- | | | | | |
| | Unsui | table Extinguishing | A solid water stream may be | inefficient. | | | | |
| | Media | : | | | | | | |
| 5.2 | Flamn | nable Properties an | dEmits toxic fumes under fire | conditions. | | | | |
| | Hazar | ds: | | | | | | |
| | | | No data available. | | | | | |
| | Flash | Pt: | No data. | | | | | |
| | Explo | sive Limits: | LEL: No data. | UEL: No da | ita. | | | |
| | Autoig | gnition Pt: | No data. | | | | | |
| 5.3 | Fire Fi | Fire Fighting Instructions: As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or | | | | | | |
| | | | equivalent), and full protectiv | • | | and eyes. | | |
| 6.1 | Brotoc | tive Precautions, | Section 6. Accider | | | | | |
| 0.1 | | | Avoid breathing vapors and d As conditions warrant wear | | | reathing apparatus, or respirator, | | |
| | | jency Procedures: | | | | es, and heavy rubber gloves). | | |
| 6.2 | - | onmental | Take steps to avoid release | | | | | |
| 0 | | utions: | | | ,, | | | |
| 6.3 | Metho | ds and Material Fo | r Contain spill and collect, as | appropriate. | | | | |
| | | | gTransfer to a chemical wast | | sal in accordance | ce with local regulations. | | |
| | Up: | | | | | | | |
| | | | Section 7. Ha | ndling and Sto | orage | | | |
| 7.1 | Preca | utions To Be Taken | Avoid breathing dust/fume/g | | | | | |
| | in Han | | Avoid prolonged or repeated | | j - | | | |
| 7.2 | | - | Keep container tightly closed | J. | | | | |
| | in Sto | | Store in accordance with info | | product insert. | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | Multi-region format | | |



Section 8. Exposure Controls/Personal Protection

| CAS # Chemical Name | Jurisdiction | Recommended Exposure Limits | Notations |
|-------------------------|--------------|---|-----------------|
| 56-81-5 Glycerol | ACGIH TLV | TLV: 10 mg/m3 | |
| | France VL | TWA: 10 mg/m3 | |
| | OSHA PELs | PEL: 15 (dust); 5 (resp.) mg/m3 | |
| | Britain EH40 | TWA: 10 mg/m3 () STEL: () | |
| 26628-22-8 Sodium azide | ACGIH TLV | CEIL: 0.29 mg/m3 | |
| | Europe | TWA: 0.1 mg/m3 STEL: 0.3 mg/m3 | Skin Absorption |
| | France VL | TWA: 0.1 mg/m3 STEL: 0.3 mg/m3 | |
| | Britain EH40 | TWA: 0.1 mg/m3 () STEL: 0.3 mg/m3 () | Skin Absorption |

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 glasses |
|------------------------------|--|
| Protective Gloves: | Compatible chemical-resistant gloves |
| Other Protective Clothing | g:Lab coat |
| Respiratory Equipment | NIOSH approved respirator, as conditions warrant. |
| (Specify Type): | |
| Work/Hygienic/Maintena | n Do not take internally. |
| ce Practices: | Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower. 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 [X]Liquid []Soli | d |
|-------------------------------|--------------------------------------|---------------|
| Appearance and Odor: | 500 µg of protein A-purified polyclo | nal antibody |
| pH: | 7.2 | |
| 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): | | |
| Vapor Density (vs. Air = 1): | No data. | |
| | | |



| | Specific | Gravity (Water = 1 |): No (| data. | | | | | |
|--------|----------------------|----------------------|--|--|---------------------|-------------------|-------------------|--------------|--|
| | Solubility in Water: | | No data. | | | | | | |
| | Octanol/ | Water Partition | No | data. | | | | | |
| | Coefficie | ent: | | | | | | | |
| | Autoigni | ition Pt: | No | data. | | | | | |
| | Decomp | osition Temperatu | re: No o | data. | | | | | |
| | Viscosity | y: | No | data. | | | | | |
| 9.2 | Other Inf | ormation | | | | | | | |
| | Percent | Volatile: | No | data. | | | | | |
| | | | Sect | ion 10. Stabil | ity and Rea | activity | | | |
| 10.1 | Reactivit | ty: | No data ava | ailable. | | | | | |
| 10.2 | Stability | : | Unstable [|] Stable [X] | | | | | |
| 10.3 | Stability | Note(s): | Stable if sto | ored in accordance w | ith information lis | sted on the produ | uct insert. | | |
| | Polymer | ization: | Will occur [|] Will not occur | [X] | | | | |
| 10.4 | Conditio | ons To Avoid: | No data ava | ailable. | | | | | |
| 10.5 | Incompa | tibility - Materials | strong base | es | | | | | |
| | To Avoid | d: : | strong oxidi | zing agents | | | | | |
| 10.6 | Hazardo | us | carbon diox | kide | | | | | |
| | Decomp | osition or | carbon mor | noxide | | | | | |
| | Byprodu | icts: | | | | | | | |
| | | | Section | on 11. Toxicol | ogical Info | rmation | | | |
| 11.1 | Informat | ion on | The toxicol | ogical effects of this p | product have not | been thoroughly | studied. | | |
| | Toxicolo | gical Effects: | Sodium azi | de - Toxicity Data: O | ral LD50 (rat): 27 | ′ mg/kg; Oral TD | LO (woman): 3 n | ng/kg; | |
| | | | Intraperiton | eal LDLO (rat): 30 m | g/kg; Subcutane | ous LD50 (rat): 4 | l5100 ug/kg; | | |
| | | • | Sodium azide - Investigated as an agricultural chemical, drug, mutagen, reproductive effector, a | | | | | | |
| | Effects: | | tumorigen. | | | | | | |
| | | | - | Registry of Toxic Eff | | | IECS) data is pre | esented here | |
| | | | | entry in RTECS for c de RTECS Number: | - | lion. | | | |
| Carcir | nogenicity | | NTP? No | IARC Monograph | | IA Regulated? N | 0 | | |
| CAS # | ¥ | Hazardous Comp | onents (Ch | nemical Name) | NTP | IARC | ACGIH | OSHA | |
| | NA | GFAP Polyclonal A | Antibody | | n.a. | n.a. | n.a. | n.a. | |
| 56 | -81-5 | Glycerol | | | n.a. | n.a. | n.a. | n.a. | |
| 2662 | 28-22-8 | Sodium azide | | | n.a. | n.a. | A4 | n.a. | |
| 764 | 7-14-5 | Sodium chloride | | | n.a. | n.a. | n.a. | n.a. | |
| 7778 | 8-77-0 | Potassium phosph | ate, Monob | asic | n.a. | n.a. | n.a. | n.a. | |
| | | Sodium phosphate | , Dibasic | | n.a. | n.a. | n.a. | n.a. | |
| 1000 | 2-18-5 | Water | | | n.a. | n.a. | n.a. | n.a. | |



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| | | Section 12. Ecolo | ogical Inform | ation | | | | |
|----------------|--|---------------------------------|---------------------------------|--------------------------------|--------------------|--|--|--|
| 40.4 Taviait | | | - | | | | | |
| 12.1 Toxicit | oxicity: Avoid release into the environment. Runoff from fire control or dilution water may cause pollution. | | | | | | | |
| 12.2 Persist | tence and | No data available. | on water may cause | | | | | |
| | lability: | | | | | | | |
| - | umulative | No data available. | | | | | | |
| Potent | | | | | | | | |
| 12.4 Mobilit | y in Soil: | No data available. | | | | | | |
| | s of PBT and vPvB | No data available. | | | | | | |
| assess | sment: | | | | | | | |
| 12.6 Other a | adverse effects: | No data available. | | | | | | |
| | | Section 13. Dispo | sal Considera | ations | | | | |
| 13.1 Waste | Disposal Method: | Dispose in accordance with loc | al, state, and federa | I regulations. | | | | |
| | | Section 14. Trar | sport Inform | ation | | | | |
| 14.1 LAND | TRANSPORT (US I | DOT): | | | | | | |
| DOT Prop | er Shipping Name: | Not dangerous goods. | | | | | | |
| DOT Haza | rd Class: | | | | | | | |
| UN/NA Nu | mber: | | | | | | | |
| 14.1 LAND | TRANSPORT (Euro | opean ADR/RID): | | | | | | |
| | Shipping Name: | Not dangerous goods. | | | | | | |
| UN Numb | | | | | | | | |
| Hazard Cl | | | | | | | | |
| | ANSPORT (ICAO/I | - | | | | | | |
| | A Shipping Name: | Not dangerous goods. | Packing Gr | 000 | | | | |
| Hazard Cl | | | Facking G | oup. | | | | |
| Additional Tra | | Transport in accordance with le | ocal, state, and fede | ral regulations. | | | | |
| Information: | | | | rai regulationer | | | | |
| | | Section 15. Regu | latory Inform | ation | | | | |
| EPA SARA (S | Superfund Amendr | nents and Reauthorization Act | • | | | | | |
| CAS # | | ponents (Chemical Name) | S. 302 (EHS) | S. 304 RQ | S. 313 (TRI) | | | |
| NA | GFAP Polyclonal | · · · · | No | No | No | | | |
| 56-81-5 | Glycerol | | No | No | No | | | |
| 26628-22-8 | Sodium azide | | Yes 500 LB | Yes 1000 LB | Yes | | | |
| 7647-14-5 | Sodium chloride | | No | No | No | | | |
| 7778-77-0 | Potassium phosphate, Monobasic No No No | | | | | | | |
| 7558-79-4 | Sodium phosphate, Dibasic No Yes 5000 LB No | | | | | | | |
| 7732-18-5 | Water | | No | No | No | | | |
| CAS # | Hazardous Com | ponents (Chemical Name) | Other US EPA o | r State Lists | • | | | |
| NA | GFAP Polyclonal | | | No; CWA NPDES: N | lo; TSCA: No; CA | | | |
| 56-81-5 | Glycerol | | CAA HAP,ODC: Inventory; CA P | No; CWA NPDES: N ROP.65: No | lo; TSCA: Yes - | | | |
| | | | | | Multi-region forma | | | |



| CHEMICAL | | | | | |
|-------------------------------------|--|--|--|--|--|
| 26628-22-8 | Sodium azide | | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No | | |
| 7647-14-5 Sodium chloride | | | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No | | |
| 7778-77-0 | 7778-77-0 Potassium phosphate, Monobasic | | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No | | |
| 7558-79-4 Sodium phosphate, Dibasic | | | CAA HAP,ODC: No; 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 Info | ormation | This SDS was prepared in acco No.1272/2008. | rdance with 29 CFR 1910.1200 and Regulation (EC) | | |
| | | Section 16. Oth | ner Information | | |
| Revision Date: | | 11/23/2019 | | | |
| Additional Info This Product: | rmation About | No data available. | | | |
| | | use. Users should make their o their particular purposes. | wn investigations to determine the suitability of the information for | | |
| | | | | | |

Multi-region format