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|  |  | accord                           | ing to Regulation (EC) No. 190                                       | )7/2006 as amended b   | y (EC) No. 1272/200       | 08  |
|--|--|----------------------------------|--|------------------------|---------------------------|---|
|  |  | Section 1. Ide                   | entification of the Substar  | nce/Mixture and of     | the Company/U             | ndertaking                                    |
| 1.1  | Product Code:     401272       Product Name:     Human Fibrinogen Affinity Sorbent |                                  |  |                        |                           |   |
| 1.2 Relevant identified uses of the substance or mixture and uses advised against:   |  |                                  |  |                        |                           |   |
|  | Releva   | Int identified uses:             | For research use only, n   | ot for human or vete   | erinary use.              |   |
| 1.3  | Details of   | of the Supplier of the           | Safety Data Sheet:   |                        |                           |   |
|  | Compa  | any Name:                        | Cayman Chemical Comp<br>1180 E. Ellsworth Rd.<br>Ann Arbor, MI 48108 | bany                   |                           |   |
|  | Web s  | ite address:                     | www.caymanchem.com   |                        |                           |   |
|  | Inform   | ation:                           | Cayman Chemical Comp   | bany                   | +1 (73                    | 4)971-3335                                    |
| 1.4  | Emerge   | ncy telephone numb               | er:  |                        |                           |   |
|  | Emerg  | ency Contact:                    | CHEMTREC Within USA  | and Canada:            | +1 (80                    | 0)424-9300                                    |
|  |  |                                  | CHEMTREC Outside US  | SA and Canada:         | +1 (70                    | 3)527-3887                                    |
|  |  |                                  | Section 2. Ha  | zards Identifi         | cation                    |   |
| 2.1<br>2.2   |  | cation of the Substar<br>ements: | nce or Mixture:  |                        |                           |   |
| GHS Signal Word: None  |  |                                  |  |                        |                           |   |
| GHS Hazard Phrases:<br>Based on evaluation of currently available data this substance or mixture is not classifiable according to GH |  |                                  |  |                        |                           |   |
|  |  |                                  |  |                        |                           | cording to GHS.                               |
|  |  | Precaution Phrases:              |  |                        |                           |   |
| No phrases apply.  |  |                                  |  |                        |                           |   |
| GHS Response Phrases:<br>No phrases apply.   |  |                                  |  |                        |                           |   |
|  | •  | Storage and Disposal             | Phrases:   |                        |                           |   |
|  |  |                                  | Storage and Section 13 for   | r Disposal informatio  | on.                       |   |
| <b>2.3</b> Adverse Human Health Material may be irritating to the mucous membranes and upper respiratory tract.                      |  |                                  |  |                        |                           | spiratory tract.                              |
| Effects and Symptoms: May be harmful by inhalation, ingestion, or skin absorption.   |  |                                  |  |                        |                           |   |
|  |  |                                  | lay cause eye, skin, or resp   | , ,                    |                           |   |
|  |  | Т                                | o the best of our knowledge  | e, the toxicological p | roperties have no         | t been thoroughly investigated.               |
|  |  | Sectio                           | n 3. Composition   | /Information           | on Ingredie               | nts   |
| CAS # / Hazardous Components (Chemical Name)/  |  | Concentration                    | EC No./  | GHS Classification     |                           |   |
| RTE  | CS #   | REACH Registration               | n No.  |                        | EC Index No.              |   |
| NA<br>NA   |  | Human Fibrinogen Affin           | ity Sorbent  | 50.0 %                 | NA<br>NA                  | No data available.                            |
|  | 58-79-4<br>500000  | Sodium phosphate, Dibasic        |  | 0.07 %                 | 231-448-7<br>NA           | Eye Damage 2: H319                            |
|  | 78-77-0<br>615500  | Potassium phosphate, Monobasic   |  | 0.01 %                 | 231-913-4<br>NA           | Skin Corr. 1B: H314<br>Eye Damage 1: H318     |
|  | 47-14-5<br>725000  | Sodium chloride                  |  | 0.4 %                  | 231-598-3<br>NA           | Eye Damage 2A: H319<br>STOT (SE) 3: H335 H336 |
|  | 28-22-8<br>)50000  | Sodium azide                     |  | 0.01 %                 | 247-852-1<br>011-004-00-7 | Acute Tox.(O) 2: H300<br>Aquatic (A) 1: H400  |



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|  | CHEMICAL  | †   |   |   |  | Aquatic (C) 1: H410  |  |  |  |
|--|---|---|---|---|--|--|--|--|--|
| 7447<br>TS805  | 7-40-7<br>50000   | Potassium chloride  |   | 0.01 %  | 231-211-8<br>NA  | Acute Tox.(O) 4: H302  |  |  |  |
| 7732<br>ZC011  | 2-18-5<br>10000   | Water   |   | 49.5 %  | 231-791-2<br>NA  | No data available.   |  |  |  |
|  |   |   |   |   |  |  |  |  |  |
|  |   |   | Section 4   | 4. First Aid Me   | asures   |  |  |  |  |
| 4.1  | Descrij<br>Measu  | otion of First Aid<br>res:                                  |   |   |  |  |  |  |  |
|  | In Case   | e of Inhalation:  | Remove to fresh air. I<br>Get immediate medica  |   | ificial respiration or   | give oxygen by trained personnel.                                    |  |  |  |
|  | 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   | e of Eye Contact:   | Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined<br>and tested by medical personnel.<br>Wash out mouth with water provided person is conscious. Never give anything by mouth to an<br>unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by<br>medical personnel. |   |  |  |  |  |  |
|  | In Case   | e of Ingestion:   |   |   |  |  |  |  |  |
|  |   |   | Section 5.  | Fire Fighting N   | <i>Aeasures</i>  |  |  |  |  |
| <ul> <li>5.1 Suitable Extinguishing Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.</li> <li>Media: Use water spray to cool fire-exposed containers.</li> <li>Unsuitable Extinguishing A solid water stream may be inefficient.</li> <li>Media:</li> </ul> |   |   |   |   | al spray.  |  |  |  |  |
| 5.2  | Flammable Properties and No data available.   |   |   |   |  |  |  |  |  |
|  | Hazard  | s:  |   |   |  |  |  |  |  |
|  |   |   | No data available.  |   |  |  |  |  |  |
|  | Flash F   | Pt:   | No data.  |   |  |  |  |  |  |
|  | Explos  | ive Limits:   | LEL: No data.   | UEL: N  | lo data.   |  |  |  |  |
|  | Autoig  | nition Pt:  | No data.  |   |  |  |  |  |  |
| 5.3  | Fire Fighting Instructions: As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approve equivalent), and full protective gear to prevent contact with skin and eyes. |   |   |   |  |  |  |  |  |
|  |   |   | Section 6. Ac   | cidental Releas   | e Measures   |  |  |  |  |
| 6.1<br>6.2<br>6.3  | Protect<br>Emerge<br>Enviror<br>Precau<br>Method  | ency Procedures:<br>nmental<br>tions:<br>ds and Material Fo | <ul> <li>d As conditions warran<br/>and appropriate pers<br/>Take steps to avoid r</li> <li>r Contain spill and coll</li> </ul>   | onal protection (rubber<br>release into the environ<br>ect, as appropriate.   | ved self-contained b<br>boots, safety goggl<br>ment, if safe to do s | preathing apparatus, or respirator,<br>es, and heavy rubber gloves). |  |  |  |
|  |   |   |   |   |  |  |  |  |  |



## SAFETY DATA SHEET Human Fibrinogen Affinity Sorbent

Section 7. Handling and Storage

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| 7.1                                  |   |                                |   | t/fume/gas/mist/vapours/s  | pray.                             |                                   |  |  |  |
|--------------------------------------|---|--------------------------------|---|--|-----------------------------------|-----------------------------------|--|--|--|
|                                      | in Handling: Avoid prolonged or repeated exposure.        |                                |   |  |                                   |                                   |  |  |  |
| 7.2                                  |   |                                |   |  |                                   |                                   |  |  |  |
|                                      | in Stori  | ng:                            | Store in accordance   | with information listed on   | the product insert.               |                                   |  |  |  |
|                                      |   | Sec                            | tion 8. Exposi  | ure Controls/Pers  | sonal Protection                  |                                   |  |  |  |
| 8.1                                  | Exposu  | e Parameters:                  |   |  |                                   |                                   |  |  |  |
| CAS                                  | #   | Partial Chemical Name          |   | Britain EH40   | France VL                         | Europe                            |  |  |  |
|                                      | NA Human Fibrinog   |                                | n Affinity Sorbent  | No data.   | No data.                          | No data.                          |  |  |  |
| 755                                  | 8-79-4  | Sodium phosphat                | e, Dibasic  | No data.   | No data.                          | No data.                          |  |  |  |
| 777                                  | 8-77-0  | Potassium phosp                | hate, Monobasic   | No data.   | No data.                          | No data.                          |  |  |  |
| 764                                  | 7-14-5  | Sodium chloride                |   | No data.   | No data.                          | No data.                          |  |  |  |
| 2662                                 | 28-22-8   | Sodium azide                   |   | TWA: 0.1 mg/m3 ()<br>STEL: 0.3 mg/m3 ()  | TWA: 0.1 mg/m3<br>STEL: 0.3 mg/m3 | TWA: 0.1 mg/m3<br>STEL: 0.3 mg/m3 |  |  |  |
| 744                                  | 7-40-7  | Potassium chloric              | le  | No data.   | No data.                          | No data.                          |  |  |  |
| 773                                  | 2-18-5  | Water                          |   | No data.   | No data.                          | No data.                          |  |  |  |
| CAS                                  | #   | Partial Chemical               | Name  | OSHA TWA   | ACGIH TWA                         | Other Limits                      |  |  |  |
|                                      | NA  | Human Fibrinoge                | n Affinity Sorbent  | No data.   | No data.                          | No data.                          |  |  |  |
| 755                                  | 8-79-4  | Sodium phosphate, Dibasic      |   | No data.   | No data.                          | No data.                          |  |  |  |
| 777                                  | 8-77-0  | Potassium phosphate, Monobasic |   | No data.   | No data.                          | No data.                          |  |  |  |
| 764                                  | 7-14-5  | Sodium chloride                |   | No data.   | No data.                          | No data.                          |  |  |  |
| 2662                                 | 28-22-8   | Sodium azide                   |   | No data.   | CEIL: 0.29 mg/m3                  | No data.                          |  |  |  |
| 744                                  | 7-40-7  | Potassium chloride             |   | No data.   | No data.                          | No data.                          |  |  |  |
| 773                                  | 7732-18-5 Water   |                                |   | No data. No data. No data.   |                                   |                                   |  |  |  |
| 8.2                                  | Exposu  | re Controls:                   |   |  |                                   |                                   |  |  |  |
| 8.2.1                                | 1 Engineering Controls Use proce                          |                                | -   | e process enclosures, local exhaust ventilation, or other engineering controls to control airborne |                                   |                                   |  |  |  |
|                                      | -   | tion etc.):                    |   | nended exposure limits.  |                                   |                                   |  |  |  |
| 8.2.2 Personal protection equipment: |   |                                |   |  |                                   |                                   |  |  |  |
|                                      | -   |                                | Safety glasses<br>Compatible chemical-resistant gloves                          |  |                                   |                                   |  |  |  |
|                                      |   | ive Gloves:                    | -   | al-resistant gloves  |                                   |                                   |  |  |  |
|                                      | Other Protective Clothing:Lab coat                        |                                | -   | espirator, as conditions warrant.  |                                   |                                   |  |  |  |
|                                      | Respiratory Equipment NIOSH approved r<br>(Specify Type): |                                |   |  |                                   |                                   |  |  |  |
|                                      | Work/Hygienic/Maintenan Do not take internal              |                                | V   |  |                                   |                                   |  |  |  |
|                                      |   |                                | utilizing this material should be equipped with an eyewash and a safety shower. |  |                                   |                                   |  |  |  |
|                                      |   |                                | -   | Vash thoroughly after handling.  |                                   |                                   |  |  |  |
|                                      |   |                                | No data available.  |  |                                   |                                   |  |  |  |
|                                      |   |                                |   |  |                                   |                                   |  |  |  |
|                                      |   |                                |   |  |                                   |                                   |  |  |  |
|                                      |   |                                |   |  |                                   |                                   |  |  |  |
|                                      |   |                                |   |  |                                   |                                   |  |  |  |
|                                      |   |                                |   |  |                                   |                                   |  |  |  |
|                                      |   |                                |   |  |                                   |                                   |  |  |  |
|                                      |   |                                |   |  |                                   |                                   |  |  |  |



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| 1                            | Informat  |  | on 9. Physical a               |                    |                   | _          |       |  |  |
|------------------------------|---|--|--------------------------------|--------------------|-------------------|------------|-------|--|--|
| 9.1                          |   | tion on Basic Physical a   | -                              |                    |                   |            |       |  |  |
|                              | -   | Il States:   | []Gas [X]Liqu                  | iid [] Solid       |                   |            |       |  |  |
|                              | Melting   | ance and Odor:   | liquid<br>No data.             |                    |                   |            |       |  |  |
|                              | Boiling   |  | No data.                       |                    |                   |            |       |  |  |
|                              | Flash P   |  | No data.                       |                    |                   |            |       |  |  |
|                              |   |  | No data.                       |                    |                   |            |       |  |  |
|                              | Evaporation Rate:<br>Flammability (solid, gas): |  | No data.<br>No data available. |                    |                   |            |       |  |  |
|                              |   | ve Limits:   | LEL: No data.                  | UI                 | EL: No data.      |            |       |  |  |
|                              | -   | Pressure (vs. Air or mm  | No data.                       | -                  |                   |            |       |  |  |
|                              | Hg):  |  |                                |                    |                   |            |       |  |  |
|                              |   | Density (vs. Air = 1):   | No data.                       |                    |                   |            |       |  |  |
|                              | Specific  | c Gravity (Water = 1):   | No data.                       |                    |                   |            |       |  |  |
|                              | -   | ty in Water:   | No data.                       |                    |                   |            |       |  |  |
|                              |   | ition Pt:  | No data.                       |                    |                   |            |       |  |  |
| 9.2                          | -   | formation  |                                |                    |                   |            |       |  |  |
|                              |   | Volatile:  | No data.                       |                    |                   |            |       |  |  |
|                              |   |  | Section 10. Stat               | bility and Re      |                   |            |       |  |  |
| 10.1                         | Reactiv   |  | ata available.                 | Sinty and ite      | sactivity         |            |       |  |  |
| 10.1                         | Stability                                       | -  |                                | 1                  |                   |            |       |  |  |
| 10.2                         | -   |  |                                |                    |                   |            |       |  |  |
| 10.5                         | -   | Stability Note(s):       Stable if stored in accordance with information listed on the product insert.         Polymerization:       Will occur [ ]         Will not occur [ X ] |                                |                    |                   |            |       |  |  |
| 10.4                         | -   |  | ata available.                 |                    |                   |            |       |  |  |
| 10.4                         |   | atibility - Materials No da  |                                |                    |                   |            |       |  |  |
| 10.5                         | To Avoi   | -  | ila avaliable.                 |                    |                   |            |       |  |  |
| 10.6                         | Hazardo   |  | ata available                  |                    |                   |            |       |  |  |
| 10.0                         |   | ardous No data available.  |                                |                    |                   |            |       |  |  |
|                              |   | products:  |                                |                    |                   |            |       |  |  |
|                              | -,  |  |                                |                    |                   |            |       |  |  |
|                              |   |  | ection 11. Toxic               |                    |                   |            |       |  |  |
| 11.1                         | Informa   |  | oxicological effects of th     | is product have no | ot been thoroughl | y studied. |       |  |  |
| <u></u>                      |   | ogical Effects:  | 4- (Ohorsteel Nie)             |                    |                   | 400        | 00111 |  |  |
| CAS                          |   | Hazardous Componen   | . ,                            | NT                 |                   | ACGIH      | OSHA  |  |  |
| 755                          | NA  | Human Fibrinogen Affin   | •                              | n.a                |                   | n.a.       | n.a.  |  |  |
|                              | 7558-79-4 Sodium phosphate, Diba                |  |                                | n.a                |                   | n.a.       | n.a.  |  |  |
|                              | 7778-77-0 Potassium phosphate, N                |  |                                | n.a                |                   | n.a.       | n.a.  |  |  |
| 7647-14-5 Sodium chloride    |   |  |                                | n.a                | a. n.a.           | n.a.       | n.a.  |  |  |
| 26628-22-8 Sodium azide      |   |  |                                | n.a                | a. n.a.           | A4         | n.a.  |  |  |
| 7447-40-7 Potassium chloride |   | Potassium chloride   |                                | n.a                | a. n.a.           | n.a.       | n.a.  |  |  |
| /44                          | 7732-18-5 Water                                 |  |                                |                    |                   |            |       |  |  |



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| Continue 40. Englandad Information                       |   |   |                                      |  |                |              |  |  |
|--|---|---|--------------------------------------|--|----------------|--------------|--|--|
|  | Section 12. Ecological Information                      |   |                                      |  |                |              |  |  |
| <b>12.1 Toxicity:</b> Avoid release into the environment |   |   |                                      |  |                |              |  |  |
|  |   |   | Runoff from fire control or dilution | on water may cause p   | ollution.      |              |  |  |
| 12.2   |   | nce and   | No data available.                   |  |                |              |  |  |
|  | Degrada   | -   |                                      |  |                |              |  |  |
| 12.3   |   | mulative  | No data available.                   |  |                |              |  |  |
|  | Potentia  |   |                                      |  |                |              |  |  |
| 12.4   | Mobility  |   | No data available.                   |  |                |              |  |  |
| 12.5   |   |   | No data available.                   |  |                |              |  |  |
|  | assessr   |   | N. 1.7. 9111                         |  |                |              |  |  |
| 12.6   | Other a   | dverse effects:   | No data available.                   |  |                |              |  |  |
|  |   |   | Section 13. Dispos                   |  |                |              |  |  |
| 13.1   | Waste D   | isposal Method:   |                                      |  | -              |              |  |  |
|  |   |   | Section 14. Tran                     | sport Informat   | ion            |              |  |  |
| 14.1   | LAND 1  | RANSPORT (US  | DOT):                                |  |                |              |  |  |
| D  | OT Prope  | er Shipping Name  | Not dangerous goods.                 |  |                |              |  |  |
|  | OT Hazar  |   |                                      |  |                |              |  |  |
| U  | N/NA Nur  |   |                                      |  |                |              |  |  |
| 14.1   |   | RANSPORT (Euro  |                                      |  |                |              |  |  |
|  |   | hipping Name:   | Not dangerous goods.                 |  |                |              |  |  |
| -  | N Numbe   |   |                                      |  |                |              |  |  |
|  | Hazard Class:   |   |                                      |  |                |              |  |  |
|  | 14.3 AIR TRANSPORT (ICAO/IATA):                         |   |                                      |  |                |              |  |  |
|  |   | Shipping Name:  | Not dangerous goods.                 |  |                |              |  |  |
|  | tional Tra  | nsport  | Transport in accordance with lo      | cal, state, and federa   | l regulations. |              |  |  |
|  | mation:   |   |                                      |  |                |              |  |  |
| <u> </u>   |   |   | Section 15. Regul                    | atory Information  | tion           |              |  |  |
|  | •   |   | nents and Reauthorization Act        | of 1986) Lists   | 1              | 1            |  |  |
| CAS  |   |   | ponents (Chemical Name)              | S. 302 (EHS)   | S. 304 RQ      | S. 313 (TRI) |  |  |
|  | NA  | -   | n Affinity Sorbent                   | No   | No             | No           |  |  |
| 755  | 8-79-4  | Sodium phospha  | te, Dibasic                          | No   | Yes 5000 LB    | No           |  |  |
| 777  | 8-77-0  | Potassium phosphate, Monobasic  |                                      | No   | No             | No           |  |  |
| 764  | 7-14-5  | Sodium chloride   |                                      | No   | No             | No           |  |  |
| 2662   | 28-22-8   | Sodium azide  |                                      | Yes 500 LB   | Yes 1000 LB    | Yes          |  |  |
| 744  | 7-40-7  | 0-7 Potassium chloride No No No   |                                      |  |                | No           |  |  |
| 773  | Y32-18-5         Water         No         No         No |   |                                      |  |                |              |  |  |
| CAS  | CAS # Hazardous Components (Chemical Name)              |   | Other US EPA or State Lists          |  |                |              |  |  |
|  | NA  | Human Fibrinogen Affinity Sorbent   |                                      | CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA<br>PROP.65: No              |                |              |  |  |
| 755  | 8-79-4  | Sodium phospha  | te, Dibasic                          | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes -<br>Inventory; CA PROP.65: No |                |              |  |  |
| 777  | 8-77-0  | Potassium phosphate, Monobasic CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes -<br>Inventory; CA PROP.65: No |                                      |  |                |              |  |  |



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| /04/-14-0                     | Sodium chionde   |   | Inventory; CA PROP.65: No   |  |  |  |
|-------------------------------|------------------|---|---|--|--|--|
| 26628-22-8                    | Sodium azide     |   | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes -<br>Inventory; CA PROP.65: No  |  |  |  |
| 7447-40-7                     | Potassium chlori | de  | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes -<br>Inventory; CA PROP.65: No  |  |  |  |
| 7732-18-5                     | Water            |   | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes -<br>Inventory; CA PROP.65: No  |  |  |  |
| Regulatory Info               | ormation         | This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008. |   |  |  |  |
|                               |                  | Section 16. Oth   | er Information  |  |  |  |
| Revision Date:                |                  | 08/11/2015  |   |  |  |  |
| Additional Infor              | mation About     | No data available.  |   |  |  |  |
| This Product:                 |                  |   |   |  |  |  |
| Company Policy or Disclaimer: |                  | currently available to us. Howeve<br>express or implied, with respect                       | s believed to be accurate and represents the best information<br>er, we make no warranty of merchantability or any other warranty,<br>to such information, and we assume no liability resulting from its<br>wn investigations to determine the suitability of the information for |  |  |  |
|                               |                  |   |   |  |  |  |