

| 1.  | PRODUCT AND COMPANY IDENTIFICATION  |   |  |  |
|-----|---|---|--|--|
| (a) | Product Name:   | Avioq VioOne™ HIV Profile™ Supplemental Assay   |  |  |
| (b) | Product Number:   | 400024  |  |  |
| (c) | Product Description:  | The VioOne™ HIV Profile™ Supplemental Assay is an enzyme-linked immunosorbent assay (ELISA) for confirmation and differentiation of individual antibodies directed to various gene products of Human Immunodeficiency Virus Type 1 (HIV-1 Group M & Group O) and Type 2 (HIV-2) in human serum or plasma. Results of HIV Profile™ can also be used to distinguish recent from longstanding HIV-1 infection and thus be used for HIV-1 incidence estimation. |  |  |
| (d) | Supplier Information:   | Avioq 104 T.W. Alexander Drive Research Triangle Park, North Carolina 27709 Telephone: 919-314-5535 Fax: 919-314-5536   |  |  |
| (e) | Emergency Phone<br>Number:  | Telephone: 919-314-5535   |  |  |
| 2.  | HAZARDS IDENTIFICATION  |   |  |  |
| (a) | Classification of the substa  | ance or mixture:  |  |  |
|     | Kit Component   | Description   | <sup>1</sup> Hazardous Components of<br>Mixture Present Above<br>Threshold Levels                            |  |
|     | Microelisa Strips<br>(2 Stripholders)                                       | Twelve per holder, contained in a re-sealable foil pouch with silica gel desiccant. Each strip contains 8 wells coated with no viral antigen, HIV-1 antigens, and HIV-2 antigens contained in a foil pouch with silica gel desiccant.   | None   |  |
|     | Sample Diluent (1 x 25 ml Bottle)  Negative Control Serum (1 x 1.0 ml Vial) | Liquid specimen diluent with biotinylated HIV-1 p24 antigen; contains animal proteins, salt, surfactants, Patent Blue V as coloring reagent, Triton x-100 (1/5% w/v) and (0.03% (w/v) bromonitrodioxane as preservative. <sup>2</sup> Contains human serum with protein stabilizers and 0.05% (w/v) bromonitrodioxane as preservative; nonreactive to HBsAg and HIV-1 antigen, antibodies to HIV, HTLV-I/II, and HCV.                                       | Triton X-100, CAS 9002-93-1: 1.5% Eye Irritation (Category 2B), H320 Skin Irritation(Category 3), H316  None |  |
|     |   |   |  |  |



| 2.  | HAZARDS IDENTIFICATION (Contd.)   |   |  |
|-----|---|---|--|
| (a) | Classification of the substance or mixture: (Contd.)  |   |  |
|     | HIV-1/2 Positive<br>Control Serum<br>(1 x 1.0 ml Vial)  | <sup>2</sup> Inactivated human serum containing protein stabilizers. Contains 0.05% (w/v) bromonitrodioxane as preservative and Amaranth as coloring agent; reactive for antibodies to HIV-1 / HIV-2. | None   |
|     | Conjugate<br>(2 Vials)  | Lyophilized, horseradish peroxidase conjugated NeutrAvidin, HIV-1 antigens, and HIV-2 antigens with protein stabilizers and Amaranth.   | None   |
|     | Conjugate Diluent<br>(1 x 55 ml bottle)   | Phosphate buffered saline containing protein stabilizers and 0.03% (w/v) bromonitrodioxane as preservative.   | None   |
|     | Peroxide Solution<br>(1 x 22 ml bottle)   | Citric acid/sodium citrate buffer containing 0.1% 2-Chloroacetamide and 0.04% urea peroxide.  | <b>2-Chloroacetamde</b> , CAS 79-07-2: 0.1%<br>Reproductive Toxicity<br>(Category 2), H361 |
|     | TMB Solution<br>(1 x 22 ml bottle)  | Citric acid containing 0.03% (w/v) tetramethylbenzidine.2HCl  | None   |
|     | <sup>1</sup> According to the OSHA Hazard Communication Standard (29 CFR 1910.1200), if a mixture contains less than 1% of a hazardous chemical or 0.1% of a carcinogen, the mixture shall be considered hazardous. Under GHS, the cutoff level for reproductive toxicity, carcinogenicity and category 1 mutagenicity is ≥0.1%. The cutoff level for all other hazar classes is ≥ 1% |   |  |
| (b) | G   | GHS label elements, precautionary statements:   |  |
|     | Kit Component   | GHS Label Elements, Precautionary St  | tatements:   |



| 2.  | HAZARDS IDENTIFICATION (Contd.)                                     |   |  |
|-----|---|---|--|
| (b) | GHS label elements, precautionary statements: (Contd.)              |   |  |
|     |   |   |  |
|     | Sample Diluent  |   |  |
|     | (1 x 15 ml Bottle)  |   |  |
|     |   |   |  |
|     |   |   |  |
|     |   | Signal Word: Warning  |  |
|     |   | Hazard Statements   |  |
|     |   | H320: Causes eye irritation   |  |
|     |   | H316: Causes mild skin irritation   |  |
|     |   | <u>Precautionary Statements</u>   |  |
|     |   | P262: Do not get in eyes, on skin, on clothing.                                       |  |
|     |   | P280: Wear protective gloves and eye protection                                       |  |
|     |   | Response Precautionary Statements   |  |
|     |   | P305 + P351+358: IF IN EYES, Rinse cautiously with water for                          |  |
|     |   | several minutes. Remove contact lenses, if present and easy to do.  Continue rinsing. |  |
|     | P337 + P313: If eye irritation persists, get medical advice/attenti |   |  |
|     |   | P302 + P353: IF ON SKIN, Rinse skin with water.                                       |  |
|     |   | P332 + P313: If skin irritation occurs, get medical advice/attention.                 |  |
|     |   | P301 + 330 +331: IF SWALLOWED, Rinse mouth. Do not induce                             |  |
|     |   | vomiting.   |  |
|     |   |   |  |
|     |   |   |  |
|     |   | 1   |  |



| 2.  | HAZARDS IDENTIFICATIO                                  | N (Contd.)  |  |  |
|-----|--|---|--|--|
| (b) | GHS label elements, precautionary statements: (Contd.) |   |  |  |
|     |  |   |  |  |
|     | Peroxide Solution<br>(1 x 22 ml bottle)                |   |  |  |
|     |  | Signal Word: Warning Hazard Statements  |  |  |
|     |  | H361: Suspected of damaging fertility or the unborn child.  Precautionary Statements P262: Do not get in eyes, on skin, on clothing.  |  |  |
|     |  | P270: Do not eat, drink or smoke when using this product. P280: Wear protective gloves and eye protection.  |  |  |
|     |  | Response Precautionary Statements P301 + P310 + P330 IF SWALLOWED: Immediately call a Poison Control Center or doctor/physician. Rinse mouth.   |  |  |
|     |  | P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.   |  |  |
|     |  | P363 Wash contaminated clothing before reuse.   |  |  |
| (c) | Hazards not otherwise covered:                         | <sup>2</sup> According to the OSHA Bloodborne Pathogen Standard (29 CFR 1910.1450), all human blood components and certain body fluids must be treated as if known to be infectious for HIV, HBV and other bloodborne pathogens.                            |  |  |
|     |  | Handle all VioOne™ HIV Profile™ Supplemental Assay biological materials as though capable of transmitting infectious agents.  Positive control sera have been inactivated but should be handled as though they contain potentially infectious agents. Other |  |  |
|     |  | components prepared from human serum or plasma have been tested using FDA-licensed tests and found to be nonreactive for the presence of HIV antibody, HTLV-I/II antibody, Hepatitis B surface antigen (HBsAg) and HCV antibody. However, as no test method |  |  |
|     |  | can offer complete assurance that infectious agents are absent all materials of human origin should be handled as though they contain infectious agents.  |  |  |



| 3.    | COMPOSITION                                 |   |  |
|-------|---|---|--|
| (a)   | Mixtures:                                   | Refer to table of Kit Components in Section 2(a).   |  |
| 4.    | FIRST AID MEASURES                          |   |  |
| (a)   | Route of Exposure                           | te of Exposure  |  |
|       | In case of skin contact:                    | Refer to Section 2(b).  |  |
|       | In case of eye contact                      | Refer to Section 2(b).  |  |
|       | If inhaled:                                 | Not an expected route of exposure.  |  |
|       | If swallowed:                               | Refer to Section 2(b).  |  |
| (b)   | Symptoms of exposure:                       | Refer to Section 2(b).  |  |
| (c)   | Indication of immediate                     | Refer to Section 2(b).  |  |
|       | medical attention                           |   |  |
| 5.    | FIRE-FIGHTING MEASURE                       |   |  |
| (a)   | Extinguishing media:                        | The components in this kit do not burn. Use extinguishing media   |  |
|       |   | that is appropriate for surrounding fire.   |  |
| (b)   | Specific hazards arising                    | Not considered to be a fire or explosion hazard   |  |
| /-\   | from the product:                           | Name  |  |
| (c)   | Special equipment and precautions for fire- | None.   |  |
|       | fighters:                                   |   |  |
| 6.    | ACCIDENTAL RELEASE ME                       | ASURES  |  |
|       |   |   |  |
| (a)   | Personal precautions, protective equipment, | Use suitable personal protective equipment such as gloves, protective clothing or laboratory coat and eye or face protection to |  |
|       | and emergency                               | avoid skin and eye contact.   |  |
|       | procedures:                                 | avoid skiii and cyc contact.  |  |
| (b)   | Methods and materials                       | Immediately clean up any spillage of material potentially containing  |  |
| ( - ) | for containment and                         | antigen or antibody with a 1:10 dilution of 5% sodium hypochlorite.   |  |
|       | cleaning up:                                | Allow 30 minutes contact time. Dispose of the cleaning material by  |  |
|       |   | an acceptable method.   |  |
| 7.    | HANDLING AND STORAGE                        |   |  |
| (a)   | Precautions for safe                        | Avoid contact with skin and eyes. Avoid ingestion and inhalation.   |  |
|       | handling:                                   |   |  |
| (b)   | Precautions for safe                        | Store between 2-8°C as indicated in the package insert.   |  |
|       | storage:                                    |   |  |
| 8.    | EXPOSURE CONTROLS/PERSONAL PROTECTION       |   |  |
| (a)   | Permissible exposure                        | No data available.  |  |
|       | limits:                                     |   |  |
| (b)   | Appropriate                                 | General laboratory ventilation is adequate.   |  |
|       | engineering controls:                       |   |  |
| (c)   | Personal protective                         | Appropriate personal protective equipment should be worn to   |  |
|       | equipment:                                  | avoid contact with skin and eyes.   |  |



| 9.      | PHYSICAL AND CHEMICAL PROPERTIES:             |                          |
|---------|---|--------------------------|
| (a)     | Appearance:                                   | Multiple kit components. |
| (b)     | Odor:   | None reported.           |
| (c)     | Odor threshold:                               | No data available.       |
| (d)     | pH:   | No data available.       |
| (e)     | Melting point/freezing point:                 | No data available.       |
| (f)     | Initial boiling point and boiling range:      | No data available.       |
| (g)     | Flash point:                                  | No data available.       |
| (h)     | Evaporation rate:                             | No data available.       |
| (i)     | Flammability (solid/gas):                     | No data available.       |
| (j)     | Upper/lower flammability or explosive limits: | No data available.       |
| (k)     | Vapor pressure:                               | No data available.       |
| (1)     | Vapor density:                                | No data available.       |
| (m<br>) | Relative density:                             | No data available.       |
| (n)     | Solubility:                                   | No data available.       |
| (o)     | Partition coefficient: n-octanol/water:       | No data available.       |
| (p)     | Auto-ignition temperature:                    | No data available.       |
| (q)     | Decomposition temperature:                    | No data available.       |
| (r)     | Viscosity:                                    | No data available.       |
| 10.     | STABILITY AND REACTIVI                        |                          |
| (a)     | Reactivity:                                   | No data available.       |
| (b)     | Chemical stability:                           | No data available.       |
| (c)     | Possibility of hazardous reactions:           | No data available.       |
| (d)     | Conditions to avoid:                          | No data available.       |
| (e)     | Incompatible materials:                       | No data available.       |
| (f)     | Hazardous decomposition products:             | No data available.       |



SDS Date: 02 July 2019

| 11. | TOXICOLOGICAL INFORM   | IATION  |
|-----|--|---|
| (a) | Information of likely  | No data available.  |
|     | routes of exposure:  |   |
| (b) | Symptoms related to  | No data available.  |
|     | the physical, chemical   |   |
|     | and toxicological characteristics:   |   |
| (c) | Delayed and immediate  | No data available.  |
| (c) | effects and also chronic   | NO data available.  |
|     | effects form short- and  |   |
|     | long-term exposure:  |   |
| (d) | Numerical measures of  | No data available.  |
|     | toxicity:  |   |
| (e) | Carcinogenicity:   | No component of this product present at levels greater than 0.1%  |
|     |  | are listed by OSHA, IARC, NTP, or CA Prop 65                      |
| 12. | ECOLOGICAL INFORMATION   | -   |
| (a) | Eco-toxicity (aquatic and terrestrial, where                                       | No data available.  |
|     | available):  |   |
| (b) | Persistence and  | No data available.  |
| (c) | degradability: Bioaccumulation:  | No data available.  |
| (d) | Mobility in soil:  | No data available.  |
| (e) | Other adverse effects:   | This product released into the environment is not expected to     |
| (e) | Other adverse effects.   | have a significant impact.  |
| 13. | DISPOSAL CONSIDERATIONS  |   |
|     | In accordance with 40 CFR Parts 261.3t this product is not considered to be an EPA |   |
|     |  | generators should always consult with state and local regulations |
|     | to ensure complete and accurate classification.                                    |   |
| 14. | TRANSPORT INFFORMAT  |   |
|     | Not regulated as a hazard  | lous material.  |
| 15. | REGULATORY INFORMAT  | TION  |
|     | SARA 302 Components  | No ingredients in this product are subject to the reporting       |
|     |  | requirements of SARA Title III, Section 302.                      |
|     | SARA 313 Components  | This product does not contain any ingredients with known CAS      |
|     |  | numbers that exceed the threshold (De Minimis) reporting levels   |
|     | SARA 311/312 Hazards   | established by SARA Title III, Section 313.  No SARA Hazards      |
|     | California Prop 65   | This product does not contain any chemicals known to the State    |
|     | Components   | of California to cause cancer, birth defects, or any other        |
|     | Components   | reproductive harm.  |
|     |  |   |
|     |  |   |



| 16. | OTHER INFORMATION  |                      |                    |
|-----|--------------------|----------------------|--------------------|
|     | Kit Component      | NFPA Rating          | HMIS Rating        |
|     | Sample Diluent     | Health Hazard: 1     | Health Hazard: 2   |
|     | (1 x 15 ml Bottle) | Fire Hazard: 0       | Fire Hazard: 0     |
|     |                    | Reactivity Hazard: 0 | Physical Hazard: 0 |
|     | Peroxide Solution  | Health Hazard: 2     | Health Hazard: 2   |
|     | (1 x 22 ml bottle) | Fire Hazard: 0       | Fire Hazard: 0     |
|     |                    | Reactivity Hazard: 0 | Physical Hazard: 0 |