

# Material Safety Data Sheet

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

|  |   |              |                                  |
|--|---|--------------|----------------------------------|
| Product Name   | <b>Simoa IL-17F<br/>Discovery Kit</b>   | Manufacturer | <b>Quanterix<br/>Corporation</b> |
| Description  | A kit of reagents to be used on the <b>Quanterix instrument (Simoa)</b> for the detection and quantification of purified proteins. Kit consists of a mixture of reagents that are non-hazardous, non-toxic and non-infectious compounds; not for human use. | Address      | 113 Hartwell Avenue              |
| Product Number   | <b>102082</b>   |              | Lexington, MA 02421              |
| MSDS Issued  | 24 Apr 2018   | Telephone    | (617) 301-9400                   |
| <b>Intended Use of the Product</b><br>Immunoassay on Simoa HD-1; For Research Use Only. Not for Diagnostic Purposes. |   |              |                                  |

## 2. HAZARDS IDENTIFICATION

### Classification of the Substance or Mixture

#### Classification (GHS-US)

Not classified

### Label Elements

#### GHS-US Labeling

Not applicable

### Other Hazards

No additional information available

### Unknown Acute Toxicity (GHS-US):

No data available

### 3. COMPOSITION – INFORMATION ON INGREDIENTS

#### Bead Stock

| Component  | CAS No.    | Percent Composition | EINECS number  |
|--|------------|---------------------|----------------|
| Water  | 7732-18-5  | 90-100%             | Not classified |
| Tris(hydroxymethyl)aminomethane  | 77-86-1    | 0.1-1%              | 201-064-4      |
| Tris(hydroxymethyl)aminomethane hydrochloride  | 118-53-1   | 0.1-1%              | 214-684-5      |
| Sodium Chloride  | 7647-14-5  | 0.1-1%              | 231-598-3      |
| Ethylenediaminetetraacetic acid disodium salt dihydrate  | 6381-92-6  | 0.1-1%              | 200-449-4      |
| Bovine Serum Albumin*  | 9048-46-8  | 0.1-1%              | 232-936-2      |
| Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone*  | 55965-84-9 | 0.01-0.1%           | Unlisted       |
| Tween 20   | 9005-64-5  | 0.1-1%              | Unlisted       |
| Carboxylated paramagnetic beads (microparticles), 2.7 um conjugated with Purified anti-human IL-17F, monoclonal Mouse IgG* | Unlisted   | 0.01-0.1%           | Unlisted       |

#### Detector Stock

| Component   | CAS No.    | Percent Composition | EINECS number  |
|---|------------|---------------------|----------------|
| Water   | 7732-18-5  | 90-100%             | Not classified |
| Purified Anti-human IL-17F, Polyclonal Goat IgG coupled with biotin*                | Unlisted   | Not applicable      | Unlisted       |
| Sodium phosphate, dibasic   | 7558-79-4  | 1-10%               | 231-448-7      |
| Potassium phosphate, Monobasic  | 7778-77-0  | 0.1-1%              | 231-913-4      |
| Sodium Chloride   | 7647-14-5  | 0.5-5.0%            | 231-598-3      |
| Potassium chloride  | 7447-40-7  | 0.01-0.1%           | 231-211-8      |
| Ethylenediaminetetraacetic acid disodium salt dihydrate                             | 6381-92-6  | 0.1-1%              | 200-449-4      |
| Bovine Serum Albumin*   | 9048-46-8  | 1-10%               | 232-936-2      |
| Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone* | 55965-84-9 | 0.01-0.1%           | Unlisted       |
| Tween 20  | 9005-64-5  | 0.1-1.0%            | Unlisted       |

## Sample Diluent

| Component   | CAS No.    | Percent Composition | EINECS number  |
|---|------------|---------------------|----------------|
| Water   | 7732-18-5  | 90-100%             | Not classified |
| Sodium phosphate, dibasic   | 7558-79-4  | 1-10%               | 231-448-7      |
| Potassium phosphate, Monobasic  | 7778-77-0  | 0.1-1%              | 231-913-4      |
| Sodium Chloride   | 7647-14-5  | 0.5-5.0%            | 231-598-3      |
| Potassium chloride  | 7447-40-7  | 0.01-0.1%           | 231-211-8      |
| Ethylenediaminetetraacetic acid disodium salt dihydrate                             | 6381-92-6  | 0.1-1%              | 200-449-4      |
| Bovine Serum Albumin*   | 9048-46-8  | 1-10%               | 232-936-2      |
| Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone* | 55965-84-9 | 0.01-0.1%           | Unlisted       |
| Tween 20  | 9005-64-5  | 0.1-1.0%            | Unlisted       |
| Interference blocker*   | Unlisted   | 0.1-1%              | Unlisted       |

## Calibrator Diluent

| Component   | CAS No.    | Percent Composition | EINECS number  |
|---|------------|---------------------|----------------|
| Water   | 7732-18-5  | 90-100%             | Not classified |
| Sodium phosphate, dibasic   | 7558-79-4  | 1-10%               | 231-448-7      |
| Potassium phosphate, Monobasic  | 7778-77-0  | 0.1-1%              | 231-913-4      |
| Sodium Chloride   | 7647-14-5  | 0.5-5.0%            | 231-598-3      |
| Potassium chloride  | 7447-40-7  | 0.01-0.1%           | 231-211-8      |
| Ethylenediaminetetraacetic acid disodium salt dihydrate                             | 6381-92-6  | 0.1-1%              | 200-449-4      |
| Bovine Serum Albumin*   | 9048-46-8  | 1-10%               | 232-936-2      |
| Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone* | 55965-84-9 | 0.01-0.1%           | Unlisted       |
| Tween 20  | 9005-64-5  | 0.1-1.0%            | Unlisted       |
| Newborn calf serum*   | Unlisted   | 0.1-1%              | Unlisted       |

## Calibrator Concentrate

| Component   | CAS No.    | Percent Composition | EINECS number  |
|---|------------|---------------------|----------------|
| Water   | 7732-18-5  | 90-100%             | Not classified |
| Purified IL-17F Antigen*  | Unlisted   | 0.1-10%             | Unlisted       |
| Sodium phosphate, dibasic   | 7558-79-4  | 1-10%               | 231-448-7      |
| Potassium phosphate, Monobasic  | 7778-77-0  | 0.1-1%              | 231-913-4      |
| Sodium Chloride   | 7647-14-5  | 0.5-5.0%            | 231-598-3      |
| Potassium chloride  | 7447-40-7  | 0.01-0.1%           | 231-211-8      |
| Ethylenediaminetetraacetic acid disodium salt dihydrate                             | 6381-92-6  | 0.1-1%              | 200-449-4      |
| Bovine Serum Albumin*   | 9048-46-8  | 1-10%               | 232-936-2      |
| Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone* | 55965-84-9 | 0.01-0.1%           | Unlisted       |
| Tween 20  | 9005-64-5  | 0.1-1.0%            | Unlisted       |

### Discovery SBG Concentrate

| Component   | CAS No.    | Percent Composition | EINECS number  |
|---|------------|---------------------|----------------|
| Water   | 7732-18-5  | 90-100%             | Not classified |
| Sodium phosphate, dibasic   | 7558-79-4  | 1-10%               | 231-448-7      |
| Potassium phosphate, Monobasic  | 7778-77-0  | 0.1-1%              | 231-913-4      |
| Potassium chloride  | 7447-40-7  | 0.01–0.1%           | 231-211-8      |
| Sodium Chloride   | 7647-14-5  | 0.5-5%              | 231-598-3      |
| Ethylenediaminetetraacetic acid disodium salt dihydrate                             | 6381-92-6  | 0.1-1%              | 200-449-4      |
| Bovine Serum Albumin  | 9048-46-8  | 1-10%               | 232-936-2      |
| Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone* | 55965-84-9 | 0.01-0.1%           | Unlisted       |
| Tween 20  | 9005-64-5  | 0.1-1.0%            | Unlisted       |
| Sucrose   | 57-50-1    | 1-10%               | 200-334-9      |
| Magneisum chloride  | 7786-30-3  | 0.01-0.1%           | Unlisted       |
| Enzyme Conjugate*   | Unlisted   | 0.01-0.1%           | Unlisted       |

### Discovery Bead Diluent

| Component   | CAS No.    | Percent Composition | EINECS number  |
|---|------------|---------------------|----------------|
| Water   | 7732-18-5  | 90-100%             | Not classified |
| Tris(hydroxymethyl)aminomethane   | 77-86-1    | 0.1-1%              | 201-064-4      |
| Tris(hydroxymethyl)aminomethane hydrochloride                                       | 118-53-1   | 0.1-1%              | 214-684-5      |
| Sodium Chloride   | 7647-14-5  | 0.1-1%              | 231-598-3      |
| Ethylenediaminetetraacetic acid disodium salt dihydrate                             | 6381-92-6  | 0.1-1%              | 200-449-4      |
| Antifoaming agent*  | Unlisted   | 0.01-0.1%           | Unlisted       |
| Bovine Serum Albumin*   | 9048-46-8  | 0.1-1%              | 232-936-2      |
| Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone* | 55965-84-9 | 0.01-0.1%           | Unlisted       |
| Tween 20  | 9005-64-5  | 0.1-1%              | Unlisted       |

### Discovery Detector Diluent

| Component   | CAS No.    | Percent Composition | EINECS number  |
|---|------------|---------------------|----------------|
| Water   | 7732-18-5  | 90-100%             | Not classified |
| Sodium phosphate, dibasic   | 7558-79-4  | 1-10%               | 231-448-7      |
| Potassium phosphate, Monobasic  | 7778-77-0  | 0.1-1%              | 231-913-4      |
| Sodium Chloride   | 7647-14-5  | 0.5-5.0%            | 231-598-3      |
| Potassium chloride  | 7447-40-7  | 0.01-0.1%           | 231-211-8      |
| Ethylenediaminetetraacetic acid disodium salt dihydrate                             | 6381-92-6  | 0.1-1%              | 200-449-4      |
| Bovine Serum Albumin*   | 9048-46-8  | 1-10%               | 232-936-2      |
| Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone* | 55965-84-9 | 0.01-0.1%           | Unlisted       |
| Tween 20  | 9005-64-5  | 0.1-1.0%            | Unlisted       |
| Goat IgG  | Unlisted   | 0.01-0.1%           | Unlisted       |

### Discovery SBG Diluent

| Component   | CAS No.    | Percent Composition | EINECS number  |
|---|------------|---------------------|----------------|
| Water   | 7732-18-5  | 90-100%             | Not classified |
| Sodium phosphate, dibasic   | 7558-79-4  | 1-10%               | 231-448-7      |
| Potassium phosphate, Monobasic  | 7778-77-0  | 0.1-1%              | 231-913-4      |
| Sodium Chloride   | 7647-14-5  | 0.5-5.0%            | 231-598-3      |
| Potassium chloride  | 7447-40-7  | 0.01-0.1%           | 231-211-8      |
| Ethylenediaminetetraacetic acid disodium salt dihydrate                             | 6381-92-6  | 0.1-1%              | 200-449-4      |
| Bovine Serum Albumin*   | 9048-46-8  | 1-10%               | 232-936-2      |
| Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone* | 55965-84-9 | 0.01-0.1%           | Unlisted       |
| Sucrose   | 57-50-1    | 1-10%               | 200-334-9      |
| Magnesium chloride  | 7786-30-3  | 0.01-0.1%           | Unlisted       |
| Tween 20  | 9005-64-5  | 0.1-1.0%            | Unlisted       |

### RGP Reagent

| Component   | CAS No.    | Percent Composition | EINECS number  |
|---|------------|---------------------|----------------|
| Water   | 7732-18-5  | 90-100%             | Not classified |
| Sodium phosphate, dibasic   | 7558-79-4  | 0.1-0.5%            | 231-448-7      |
| Potassium phosphate, Monobasic  | 7778-77-0  | 0.01-0.1%           | 231-913-4      |
| Potassium chloride  | 7447-40-7  | 0.01-0.1%           | 231-211-8      |
| Sodium Chloride   | 7647-14-5  | 0.1-1%              | 231-598-3      |
| Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone* | 55965-84-9 | 0.1-0.5%            | Unlisted       |
| Pluronic F-127  | 9003-11-6  | 0.01-0.1%           | Unlisted       |
| Resorufin b-galactopyranoside   | 95079-19-9 | 0.001-0.01%         | Unlisted       |

\* These ingredients, within the current knowledge of the supplier and in the concentrations applicable, are not classified as hazardous to health or to the environment.

- **Other components of the HD-1 Data Reduction Teach Kit:**

Following consumables are also part of the aforementioned kit. These consumables are paper and plastic-based and are not chemicals/reagents.

- Reagent bottle pack
- Box, Discovery Assay Kit
- Box, Large Interior
- Box Insert, Large Interior
- Box, Small Interior
- Box Insert, Small Interior
- Label, Blank, Kit Box, 3x4
- Label, Blank, Kit Box, 2x3
- Label, Blank, Kit Box, 1x2
- Label, Printed (2x – SBG, Detector, Bead and Sample Diluent)

#### 4. **FIRST AID MEASURES**

##### Description of First Aid Measures:

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation:** When symptoms occur: go into open air and ventilate suspected area.

**First-aid Measures After Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes.

**First-aid Measures After Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**First-aid Measures After Ingestion:** Rinse mouth. Do NOT induce vomiting.

##### Most important symptoms and effects, both acute and delayed:

**Symptoms/Injuries:** None expected under normal conditions of use.

**Symptoms/Injuries After Skin Contact:** Contact during a long period may cause light irritation.

**Symptoms/Injuries After Eye Contact:** Direct contact with the eyes is likely irritating.

**Symptoms/Injuries After Ingestion:** May be harmful if swallowed.

## 5. FIRE FIGHTING MEASURES

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### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Alcohol foam, polymer foam, dry chemical powder, carbon dioxide, water spray, fog.

**Unsuitable Extinguishing Media:** None known.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** If the product is involved in a fire, it can release toxic chlorine gases.

### 5.3. Advice for Firefighters

**Firefighting Instructions:** Exercise caution when fighting any chemical fire.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

## 6. ACCIDENTAL RELEASE MEASURES

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### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Do not breathe fumes from fires or vapours from decomposition.

#### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Absorb and/or contain spill with inert material, then place in suitable container.

**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely.

### 6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

## 7. HANDLING AND STORAGE

**Handling:** Refer to section 8. Wear appropriate personal protective equipment when using this product.

**Storage:** Some contents stored at Room Temperature. Some contents storage at 2-8 degrees Celsius and others at -20 degrees Celsius.

## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

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### 8.1. Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

### 8.2. Exposure Controls

**Appropriate Engineering Controls** : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

**Personal Protective Equipment** : Gloves. In case of splash hazard: safety glasses.



**Hand Protection** : Wear chemically resistant protective gloves.

**Eye Protection** : Chemical goggles or safety glasses.

**Other Information** : When using, do not eat, drink or smoke.

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## 9. STABILITY AND REACTIVITY

Incompatibility: (materials to avoid) None known

Stability: Stable

Hazardous Polymerization: None

Conditions to Avoid: None



## 10. TOXICOLOGICAL INFORMATION

### 11.1. Information On Toxicological Effects

Acute Toxicity : Not classified

|  |  |
|--|--|
| <b>Potassium chloride (7447-40-7)</b>  |  |
| LD50 Oral Rat  | 2600 mg/kg                                 |
| <b>Dihydrogen potassium phosphate (7778-77-0)</b>  |  |
| LD50 Dermal Rabbit   | > 4640 mg/kg                               |
| <b>Sodium chloride (7647-14-5)</b>   |  |
| LD50 Oral Rat  | 3 g/kg                                     |
| LD50 Dermal Rabbit   | > 10 g/kg                                  |
| LC50 Inhalation Rat (mg/l)   | > 42 g/m <sup>3</sup> (Exposure time: 1 h) |
| <b>Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone (55965-84-9)</b> |  |
| LD50 Oral Rat  | 53 mg/kg                                   |

**Skin Corrosion/Irritation:** Not classified

**Serious Eye Damage/Irritation:** Not classified

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Skin Contact:** Contact during a long period may cause light irritation.

**Symptoms/Injuries After Eye Contact:** Direct contact with the eyes is likely irritating.

**Symptoms/Injuries After Ingestion:** May be harmful if swallowed.

## 11. ECOLOGICAL INFORMATION

Data not yet available.

## 12. DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national and international regulations.

## 13. TRANSPORTATION INFORMATION

To the best of our knowledge, this product is not regulated as a hazardous material.

## 14. REGULATORY INFORMATION

### US Federal Regulations

|   |
|---|
| <b>Potassium chloride (7447-40-7)</b>                                     |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |
| <b>Dihydrogen potassium phosphate (7778-77-0)</b>                         |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |
| <b>Sodium chloride (7647-14-5)</b>  |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |
| <b>Water (7732-18-5)</b>  |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |
| <b>Polyoxyethylene sorbitan monolaurate (9005-64-5)</b>                   |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |

### US State Regulations

|   |
|---|
| <b>Potassium chloride (7447-40-7)</b>                   |
| U.S. - Texas - Effects Screening Levels - Long Term     |
| U.S. - Texas - Effects Screening Levels - Short Term    |
| <b>Sodium chloride (7647-14-5)</b>                      |
| U.S. - Texas - Effects Screening Levels - Long Term     |
| U.S. - Texas - Effects Screening Levels - Short Term    |
| <b>Polyoxyethylene sorbitan monolaurate (9005-64-5)</b> |
| U.S. - Texas - Effects Screening Levels - Long Term     |
| U.S. - Texas - Effects Screening Levels - Short Term    |

## 15. OTHER INFORMATION

### Disclaimer:

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