

# Material Safety Data Sheet

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	Cytokine 3-plex B	Manufacturer	Quanterix Corporation
Description	A kit to be used on the Quanterix instrument (Simoa) for the detection and quantification of proteins. The kit consists of a mixture of diagnostic reagents that are non-hazardous, non-toxic and non-infectious compounds; not for human use.	Address	113 Hartwell Avenue
Product Number	101319		Lexington, MA 02421
MSDS Issued	17 <sup>th</sup> July, 2015	Telephone	(617) 301-9400
		CHEMTREC	(800) 424-9300 Customer # 21132
<b>Intended Use of the Product</b> 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

#### Mixtures

##### Cytokine 3-plex B Bead Reagent

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	0.2-2%	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
Anti-foaming agent	NA	0.01-0.1%	NA
Anti-IL-17a antibody	N/A	N/A	N/A
Anti-h IL-6 capture antibody	N/A	N/A	N/A
Anti-TNFa antibody	N/A	N/A	N/A

##### Cytokine 3-plex B Detector Reagent

Component	CAS No.	Percent Composition	EINECS number
Water	7732-18-5	90-100%	Not classified
Sodium phosphate, dibasic	7558-79-4	1-5%	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
Ethylenediaminetetraacetic acid disodium salt dihydrate	6381-92-6	0.1-1%	200-449-4
Sodium Chloride	7647-14-5	0.1-1%	231-598-3
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%	Unlisted
Anti-IL-17a antibody	N/A	N/A	N/A
Human IL-6 antibody	N/A	N/A	N/A
Anti-TNFa antibody	N/A	N/A	N/A

### Sample Diluent

Component	CAS No.	Percent Composition	EINECS number
Water	7732-18-5	90-100%	Not classified
Sodium phosphate, dibasic	7558-79-4	1-5%	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	7447-40-7	0. 1-1%	231-211-8
Ethylenediaminetetraacetic acid disodium salt dihydrate	7647-14-5	0.1-1%	231-598-3
Bovine Serum Albumin	6381-92-6	0.1-1%	200-449-4
Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone	9048-46-8	0.05-0.5%	232-936-2
Tween 20	55965-84-9	0.05-0.5%	Unlisted
Interference blockers	N/A	0.1-1%	Unlisted

### SBG Reagent

Component	CAS No.	Percent Composition	EINECS number
Water	7732-18-5	90-100%	Not classified
Sodium phosphate, dibasic	7558-79-4	1-5%	231-448-7
Potassium phosphate, Monobasic	7778-77-0	0.5-2%	231-913-4
Potassium chloride	7447-40-7	0.1 – 1%	231-211-8
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	1-10%	232-936-2
Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone	55965-84-9	0.1-1%	Unlisted
Tween 20	9005-64-5	0.1-1%	Unlisted
Magneisum chloride	7786-30-3	0.1-1%	Unlisted
Enzyme Conjugate	NA	0.01-0.1%	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

## Calibrators

Component	CAS No.	Percent Composition	EINECS number
Water	7732-18-5	90-100%	Not classified
Sodium phosphate, dibasic	7558-79-4	1-5%	231-448-7
Potassium phosphate, Monobasic	7778-77-0	0.1-1%	231-913-4
Ethylenediaminetetraacetic acid disodium salt dihydrate	6381-92-6	0.1-1%	200-449-4
Potassium chloride	7447-40-7	0.01-0.1%	231-211-8
Bovine Serum Albumin	9048-46-8	1-10%	232-936-2
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	0.1-1%	Unlisted
Tween 20	9005-64-5	0.1-1%	Unlisted
Recombinant IL-17a antigen	N/A	0.01-0.1%	Unlisted
IL-6 Antigen	NA	0.01-0.1%	Unlisted
Recombinant TNFa antigen	N/A	0.01-0.1%	Unlisted
Interference blockers	N/A	0.01-0.1%	Unlisted

## 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.

### Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

## 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 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. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear Liquid
Odor:	Odorless
Solubility:	Miscible in water
Physical state:	Liquid
Melting Point:	Not Available
Boiling Point:	Not Available
Vapor Pressure:	Not Available
Vapor Density:	Not Available
pH:	7.0-8.0
Evaporation Rate:	Not Available

## 10. STABILITY AND REACTIVITY

Incompatibility: (materials to avoid)	None known
Stability:	Stable
Hazardous Polymerization:	None
Conditions to Avoid:	None

## 11. 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.

## 12. ECOLOGICAL INFORMATION

Data not yet available.

## 13. DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

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

## 14. TRANSPORTATION INFORMATION

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

## 15. 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

**16. OTHER INFORMATION**

## Disclaimer:

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