

Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	Simoa Homebrew Assay Starter Kit	Manufacturer	Quanterix Corporation
Description	Kit consisting of various components with appropriate instructions for the customer to prepare reagents to be tested on Quanterix instrument for detection and quantification of proteins; the components are non-hazardous, non-toxic and non-infectious compounds; not for human use	Address	113 Hartwell Avenue Lexington, MA 02421
Product Numbers	101351		
MSDS Issued	May 15, 2015	Telephone	(617) 301-9400
		CHEMTREC	(800) 424-9300 Customer # 21132
Intended Use of the Product 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

3.1 Bead Conjugation and Biotinylation Reaction Buffers

Homebrew bead conjugation buffer

Component	CAS No.	Percent Composition	EINECS number
Water	7732-18-5	90-100%	Not classified
2-(N-morpholino)ethanesulfonic acid	4432-31-9	0.1-1%	NA
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

Homebrew Bead Wash buffer

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
Tween 20	9005-64-5	0.1-1%	Unlisted

Homebrew bead blocking buffer

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
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

Bead diluent buffer

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
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

Homebrew Biotinylated Reaction Buffer

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

Homebrew Detector/Sample Diluent

Component	CAS No.	Percent Composition	EINECS number
Water	7732-18-5	90-100%	Not classified
Sodium phosphate, dibasic	7558-79-4	0.2-2%	231-448-7
Potassium phosphate, Monobasic	7778-77-0	0.03-0.3%	231-913-4
Sodium Chloride	7647-14-5	0.5-5%	231-598-3
Potassium chloride	7447-40-7	0.01-0.1%	231-211-8
Bovine Serum Albumin	9048-46-8	0.05-0.5%	232-936-2
Tween 20	9005-64-5	0.1-1%	Unlisted
Ethylenediaminetetraacetic acid disodium salt dihydrate	6381-92-6	0.1-1%	200-449-4
Interference blockers	N/A	N/A	Unlisted
Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone	55965-84-9	0.05-0.5%	Unlisted

SBG Concentrate and SBG 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	0.5-2%	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
Magnesium chloride	7786-30-3	0.1-1%	Unlisted
Enzyme Conjugate	NA	0.01-0.1%	Unlisted

EDAC

Component	CAS No.	Percent Composition	EINECS number
1-Ethyl-3-(3-dimethylaminopropyl carbodiimide)	6381-92-6	100%	200-449-4

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

Simoa Homebrew Training Kit

Component	CAS No.	Percent Composition	EINECS number
Anti-human PSA capture antibody	N/A	N/A	N/A
Anti-human PSA clone antibody	N/A	N/A	N/A
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%	231-598-3
Potassium chloride	7447-40-7	0.01-0.1%	231-211-8
Newborn Calf Serum (NCS)	N/A	0.1-1%	N/A
Tween 20	9005-64-5	0.1-1%	Unlisted
Interference blockers	N/A	N/A	Unlisted
WHO International Standard Prostate Specific Antigen	NA	0.1-10%	N/A

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.

FIRE FIGHTING MEASURES

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.

5. ACCIDENTAL RELEASE MEASURES

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.

6. 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

7. EXPOSURE CONTROLS, PERSONAL PROTECTION

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.

8. 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

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

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

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

US State Regulations

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

15. OTHER INFORMATION

Disclaimer:

The information and recommendations contained herein are based upon tests believed to be reliable. However, Quanterix Corporation does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. Quanterix Corporation assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.