

Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	Simoa Homebrew Assay Development Kit
Description	A kit of reagents to be used on the Quanterix instrument (Simoa) 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.
Manufacturer	Quanterix Corporation
Address	900 Middlesex Turnpike, Building 1, Billerica, MA 01821
Product Number	101354
SDS Issued	20 May 2019
Telephone	(617) 301-9400
Intended Use of the	Product
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**

Homebrew Carboxylated Paramagnetic Beads

Component	CAS No.	Percent Composition	EINECS number
Water	7732-18-5	90-100%	Not classified
Sodium phosphate, dibasic heptahydrate	7558-79-4	0.1-1%	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
Sodium Azide	26628-22-8	0.01-0.1%	247-852-1
Carboxylated paramagnetic beads (microparticles), 2.7 um	Unlisted	0.03-0.3%	Unlisted

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%	Unlisted
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	0.01-0.1%	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 blocker*	Unlisted	0.01-0.1%	Unlisted
Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone	55965-84-9	0.05-0.5%	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 Homebrew Assay Development Kit:

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

- Homebrew bead reagent barcoded label (paper based consumable)
- Homebrew detector reagent barcoded label (paper based consumable)
- Homebrew SBG Reagent barcoded label (paper based consumable)
- Homebrew Sample Diluent barcoded label (paper based consumable)

The consumables listed above are non-hazardous, non-toxic and non-flammable. A separate SDS is not being provided for these items.

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 room

temperature.



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:

Boiling Point:

Vapor Pressure:

Vapor Density:

Not Available

Not Available

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/m³ (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	chlorida	(7447-40-7)	١
Potassium	cmoriae	17447-40-7	J

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.