# **Material Safety Data Sheet**

# 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	HD-1 Data Reduction Teach Kit	Manufacturer	Quanterix Corporation		
Description	A kit to be used on the Quanterix instrument for the detection and quantification of cardiac proteins. Kit consists of a mixture of reagents that are non-hazardous, non-toxic and non-infectious compounds; not for human use. Only for laboratory use.	Address	113 Hartwell Avenue		
Product Number	101071		Lexington, MA 02421		
MSDS Issued	December 22, 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**

# **HD-1 Rainbow 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 dehydrate	6381-92-6	0.1-1%	200-449-4
Bovine Serum Albumin	9048-46-8	0.5-5%	232-936-2
Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone	55965-84-9	0.05-0.5%	Unlisted
Tween 20	9005-64-5	0.1-1%	Unlisted
Antifoaming agent	Unlisted	0.01-0.1%	Unlisted
Carboxylated paramagnetic beads (microparticles), 2.7 um conjugated with appropriate dyes for fluorescent levels	Unlisted	0.01-0.1%	Unlisted

# **HD-1 Blank 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 dehydrate	6381-92-6	0.1-1%	200-449-4
Bovine Serum Albumin	9048-46-8	0.5-5%	232-936-2
Mixture, 3(2H)-isothiazolone, 5- chloro-2- methyl- with 2-methyl-3(2H)- isothiazolone	55965-84-9	0.05-0.5%	Unlisted
Tween 20	9005-64-5	0.1-1%	Unlisted
Antifoaming agent*	Unlisted	0.01-0.1%	Unlisted
Carboxylated paramagnetic beads (microparticles), 2.7 um*	Unlisted	0.01-0.1%	Unlisted

# **HD-1 High AEB Bead Reagent**

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
Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone	55965-84-9	0.05-0.5%	Unlisted
Tween 20	9005-64-5	0.1-1%	Unlisted
Antifoaming agent*	Unlisted	0.01-0.1%	Unlisted
Carboxylated paramagnetic beads (microparticles), 2.7 um coupled with Streptavidin-biotin conjugate	Unlisted	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

# **HD-1 Teach Kit System Detector Reagent**

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Component	CAS No.	Percent Composition	EINECS number
Water	7732-18-5	90-100%	Not classified
Sodium phosphate, dibasic heptahydrate	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	0.1-1%	231-211-8
Sodium Chloride	7647-14-5	1-10%	231-598-3
Mixture, 3(2H)-isothiazolone, 5- chloro-2- methyl- with 2-methyl-3(2H)- isothiazolone	55965-84-9	0.05-0.5%	Unlisted
Tween 20	9005-64-5	0.1-1%	Unlisted

# **HD-1 Teach Kit System SBG Reagent**

Component	CAS No.	Percent Composition	EINECS number
Water	7732-18-5	90-100%	Not classified
Sodium phosphate, dibasic heptahydrate	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	0.1-1%	231-211-8
Sodium Chloride	7647-14-5	1-10%	231-598-3
Mixture, 3(2H)-isothiazolone, 5- chloro-2- methyl- with 2-methyl-3(2H)- isothiazolone	55965-84-9	0.05-0.5%	Unlisted
Tween 20	9005-64-5	0.1-1%	Unlisted

# **HD-1 Teach Kit System Sample Reagent**

Component	CAS No.	Percent Composition	EINECS number
Water	7732-18-5	90-100%	Not classified
Sodium phosphate, dibasic heptahydrate	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	0.1-1%	231-211-8
Sodium Chloride	7647-14-5	1-10%	231-598-3
Mixture, 3(2H)-isothiazolone, 5- chloro-2- methyl- with 2-methyl-3(2H)- isothiazolone	55965-84-9	0.05-0.5%	Unlisted
Tween 20	9005-64-5	0.1-1%	Unlisted

<sup>\*</sup>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-based and are not chemicals/reagents.

- Box, Assay kit (paper based consumable)
- Label, Blank, Kit Box, 2x3 (paper based consumable)
- Label, Blank, Kit Box, 1x2 (paper based consumable)
- Box Insert, Assay Kit (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.

## 5. 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.

## 6. 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.

#### 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 and others at –

Room Temperature.

# 8. 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.

# 9. 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

# 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

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.

## 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

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#### **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

#### 16. 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.