

SAFETY DATA SHEET

CREATION DATE: 05Dec19

REVISION DATE: 05Dec19

REVISION NUMBER: 01

1.0 IDENTIFICATION

Product Name	Cira Sample Diluent 15
Description	Sample Diluent for Kit
Manufacturer	Quanterix Corporation
Address	900 Middlesex Turnpike, Building 1, Billerica, MA 02421
Product Number	1863321
SDS Issued	05Dec19
Telephone	(617) 301-9400
Intended Use of the Product	
Immunoassay on Quanterix SP-X; For Research Use Only. Not for Diagnostic Purposes.	

2.0 HAZARD(S) IDENTIFICATION

2.1 Classification

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

2.2 GHS Label Elements

Not applicable.

2.3 Signal Word

Not applicable.

2.4 Hazard Statements

No known significant effects or critical hazards.

2.5 Precautionary Statements

Not applicable.

2.6 Hazards Not Otherwise Classified

Not applicable.

3.0 **COMPOSITION – INFORMATION ON INGREDIENTS**

3.1 Substance / Mixture

Mixture.

3.2 Ingredient Name^{1,2}

1. **Sample Diluents**

Sample Diluent 1 (TCM), Sample Diluent 2 (pfBAD), BAD Sample Diluent 3, Sample Diluent 4 (Bovine), Sample Diluent 6 (VEGF), Sample Diluent 8 (CIRA), Sample Diluent 10, Sample Diluent 11 (CIRA), Sample Diluent 15 (CIRA), Sample Diluent 16 – 20

COMPONENT	PERCENTAGE	CAS #
Bovine Gamma Globulin	< 0.0001%	
Bovine Serum Albumin	1 – 10%	9048-46-8
Charcoal Stripped Human Serum	1 – 12%	
Dulbecco's Phosphate Buffered Saline	1 – 10%	
Dihydrogen Potassium Phosphate	1 – 5%	7778-77-0
Fetal Bovine Serum	1 – 10%	69-74-9
HAMA Blocker (heterophilic antibody)	< 0.0001%	
Hydrogen Bromide; Hydrobromic Acid	< 0.0001%	10035-10-6
Potassium Chloride	1 – 5%	7447-40-7
Rabbit Serum	1 – 10%	
RMPI Medium	1 – 10%	
Sodium Azide	< 0.25%	26628-22-8
Sodium Chloride	1 – 5%	7647-14-5
Sodium Phosphate Dibasic	1 – 5%	7558-79-4
Tween 20	0.01 – 1%	9005-64-5
Water	66 – 90%	7732-18-5

NOTE 1: Any concentration shown as a range is to protect confidentiality or is due to batch variation.

NOTE 2: There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

NOTE 3: 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

4.0 FIRST AID MEASURES

4.1 Description of Necessary First Aid Measures

1. General

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

2. Eye Contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

3. Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

4. Skin Contact

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

5. Ingestion

Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur

4.2 Most Important Symptoms and Effects, Acute and Delayed

1. Potential Acute Health Effects

<u>Eye Contact:</u>	No known significant effects or critical hazards.
<u>Inhalation:</u>	No known significant effects or critical hazards.
<u>Skin Contact:</u>	No known significant effects or critical hazards.
<u>Ingestion:</u>	No known significant effects or critical hazards.

2. Over-exposure Signs and Symptoms

<u>Eye Contact:</u>	No data available.
<u>Inhalation:</u>	No data available.
<u>Skin Contact:</u>	No data available.
<u>Ingestion:</u>	No data available.

5.0 **FIRE-FIGHTING MEASURES**

5.1 Extinguishing Media

1. **Suitable Extinguishing Media**

Use an extinguishing agent suitable for the surrounding fire.

2. **Unsuitable Extinguishing Media**

None known.

5.2 Special Hazards Arising from the Substance or Mixture

1. **Fire Hazard**

Not flammable.

2. **Explosion Hazard**

Product is not explosive.

3. **Thermal Decomposition Products**

Decomposition products may include the following materials:

- carbon dioxide;
- carbon monoxide;
- sulfur oxides;
- metal oxide/oxides

5.3 Advice for Fire-Fighters

1. **Special Protective Actions**

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

2. **Special Protective Equipment**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6.0 **ACCIDENTAL RELEASE MEASURES**

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

1. **For Non-Emergency Personnel**

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

2. For Emergency Responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

6.2 Environmental Precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and Materials for Containment and Cleaning Up

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7.0 HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

7.2 Conditions for Safe Storage, Including Incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8.0 EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Occupational Exposure Limits

Ingredient Name	Exposure Limits
Sodium Azide	<u>ACGIH TLV - USA</u>
	– C: 0.29 mg/m ³ , (as Sodium azide)
	– C: 0.11 ppm, (as Hydrazoic acid vapor)
	<u>OSHA PEL - USA</u>
	– CEIL: 0.1 ppm, (as HN ₃)
	– CEIL: 0.3 mg/m ³ , (as NaN ₃)
Sodium Azide	<u>NIOSH REL - USA</u>
	– CEIL: 0.1 ppm, (as HN ₃)
	– CEIL: 0.3 mg/m ³ , (NAN ₃)

8.2 Recommended Monitoring procedures:

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

8.3 Engineering Measures:

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

8.4 Hygiene Measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

8.5 Personal Protection

1. **Respiratory**

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

2. **Hands**

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

3. **Eyes**

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

4. **Skin**

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

1. Appearance

Physical State	Solid / Liquid
Color	Varies / Clear
Odor	No data available.
Odor Threshold	No data available.
pH	No data available.
Melting Point	No data available.
Boiling Point	No data available.
Flash Point	No data available.
Evaporation Rate	No data available.
Flammability (solid, gas)	No data available.
Lower and Upper Explosive Limits	No data available.
Vapor Pressure	No data available.
Vapor Density	No data available.
Relative Density	No data available.
Solubility	No data available.
Partition Coefficient: n-octanol/water	No data available.
Auto-ignition Temperature	No data available.
Decomposition Temperature	No data available.
Viscosity	No data available.

10.0 STABILITY AND REACTIVITY

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical Stability

The product is stable.

10.3 Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to Avoid

Keep away from heat.

10.5 Incompatible Materials

None known.

10.6 Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11.0 TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

1. Acute Toxicity

INGREDIENT	RESULT	SPECIES	DOSE	EXPOSURE
Sodium Azide	LD50 Dermal	Rabbit	20 mg/kg	-
	LD50 Dermal	Rat	50 mg/kg	-
	LD50 Oral	Rat	27 mg/kg	-

2. Irritation / Corrosion

No data available.

3. Sensitization

No data available.

4. Mutagenicity

No data available.

5. Carcinogenicity

No data available.

6. Reproductive Toxicity

No data available.

7. Teratogenicity

No data available.

8. Specific Organ Toxicity (Single Exposure)

No data available.

9. Specific Organ Toxicity (Repeated Exposure)

NAME	CATEGORY	ROUTE OF EXPOSURE	TARGET ORGANS
Sodium Azide	Category 2	Not Determined	Cardiovascular system, central nervous system (CNS) and lungs

10. Aspiration Hazard

No data available.

11. Information on the Likely Routes of Exposure

No data available.

12. Potential Chronic Health Effects

General	No known significant effects or critical hazards.
Carcinogenicity:	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity:	No known significant effects or critical hazards.
Developmental:	No known significant effects or critical hazards.
Fertility Effects	No known significant effects or critical hazards.

13. Numerical Measures of Toxicity

Acute Toxicity Estimates

NAME	ORAL (mg/kg)	DERMAL (mg/kg)	INHALATION (ppm)	INHALATION (mg/L)	INHALATION (mg/L) DUST
Sodium Azide	27	20	N/A	N/A	N/A

12.0 ECOLOGICAL INFORMATION

12.1 Ecological Toxicity

NAME	RESULT	SPECIES	EXPOSURE
Sodium Azide	Acute EC50 0.348 mg/l Fresh water	Algae – Pseudokirchneriella subcapitata	96 Hours
	Acute EC50 6.4 mg/l Fresh water	Crustaceans - Simocephalus serrulatus – Larvae	48 Hours
	Acute EC50 4.2 mg/l Fresh water	Daphnia - Daphnia pulex – Larvae	48 Hours
	Acute LC50 0.68 mg/l Fresh water	Fish - Lepomis macrochirus	96 Hours
	Chronic NOEC 5600 µg/l Marine water	Algae - Macrocyctis pyrifera	96 Hours

12.2 Persistence and Degradability

No data available.

12.3 Bioaccumulative Potential

No data available.

12.4 Mobility in Soil

No data available.

12.5 Other Adverse Effects

No data available.

13.0 DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14.0 TRANSPORTATION INFORMATION

14.1 Hazard Class/ UN Number/ Proper Shipping Name

Not regulated.

14.2 DOT

Not regulated.

14.3 IATA

Not regulated.

14.4 IMDG

Not regulated.

15.0 REGULATORY INFORMATION

No data available.

16.0 OTHER INFORMATION

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