

○AccuCardia

Product Numbers: ACC6301/ACC6301I

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: 08/06/2014 Date of issue: 08/06/2014

Version: 1.0

SECTION 1: IDENTIFICATION

<u>Product Identifier</u> <u>Product Form: Mixture</u>

Product Name: AccuCardia ELISA Plate Product Code: Zeus Part No: 6302 Intended Use of the Product For In Vitro diagnostic use only

Name, Address, and Telephone of the Responsible Party

Company

Zeus Scientific, Inc. P.O. Box 38 Raritan , NJ 08869 908-526-3744

Emergency Telephone Number Emergency number : 908-526-3744

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Not classified

Label Elements

GHS-US Labeling

No labeling required

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200] and the Canadian Hazardous Products Act (HPA): this product and its components are not considered hazardous.

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible). **Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: May cause respiratory irritation. **Skin Contact:** May cause skin irritation. **Eye Contact:** May cause eye irritation.

Ingestion: Ingestion is likely to be harmful or have adverse effects. **Chronic Symptoms:** None expected under normal conditions of use.

08/06/2014 EN (English US) 1/5

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO2).

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection. **Emergency Procedures:** Stop leak if safe to do so. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical

barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Reference to Other Sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

Specific End Use(s)

For In Vitro diagnostic use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves.



Viscosity



Materials for Protective Clothing: Not required for normal conditions of use.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed

established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State : Solid

Not available **Appearance** Not available Odor **Odor Threshold** Not available рΗ Not available Relative Evaporation Rate (butylacetate=1) Not available Not available **Melting Point Freezing Point** Not available **Boiling Point** Not available **Flash Point** Not available **Auto-ignition Temperature** Not available **Decomposition Temperature** Not available Flammability (solid, gas) Not available **Lower Flammable Limit** Not available **Upper Flammable Limit** Not available **Vapor Pressure** Not available Relative Vapor Density at 20 °C Not available **Relative Density** Not available Not available **Specific Gravity** Not available Solubility Partition coefficient: n-octanol/water Not available

Explosion Data – Sensitivity to Mechanical Impact : Not expected to present an explosion hazard due to mechanical impact. Explosion Data – Sensitivity to Static Discharge : Not expected to present an explosion hazard due to static discharge.

Not available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Incompatible materials.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. **Hazardous Decomposition Products:** Carbon oxides (CO, CO2).

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified
LD50 and LC50 Data: Not available
Skin Corrosion/Irritation: Not classified
Serious Eye Damage/Irritation: Not classified
Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available **Carcinogenicity:** Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause respiratory irritation. Symptoms/Injuries After Skin Contact: May cause skin irritation. Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data: Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not classified

Persistence and Degradability Not available

Bioaccumulative Potential Not available

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

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

Ecology – Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT
 14.2 In Accordance with IMDG
 14.3 In Accordance with IATA
 Not regulated for transport
 Not regulated for transport

14.4 In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Neither this product nor its chemical components appear on any US federal lists.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

US State Regulations

Neither this product nor its chemical components appear on any US state lists.

Canadian Regulations

AccuCardia ELISA Plate	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 08/06/2014

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200.

Party Responsible for the Preparation of This Document

Zeus Scientific, Inc. P.O. Box 38 Raritan , NJ 08869 908-526-3744

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS

08/06/2014 EN (English US) 5/5







Safety Data Sheet

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Version: 1.0

SECTION 1: IDENTIFICATION

<u>Product Identifier</u> <u>Product Form: Mixture</u>

Product Name: AccuCardia ELISA HRP-Conjugate

Product Code: Zeus Part No: 6303 Intended Use of the Product For In Vitro diagnostic use only

Name, Address, and Telephone of the Responsible Party

Company

Zeus Scientific, Inc. P.O. Box 38 Raritan , NJ 08869 908-526-3744

<u>Emergency Telephone Number</u> <u>Emergency number</u> : 908-526-3744

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US) Skin Sens. 1 H317 Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : H317 - May cause an allergic skin reaction Precautionary Statements (GHS-US) : P261 - Avoid breathing mist, spray, vapors

P272 - Contaminated work clothing should not be allowed out of the workplace

P280 - Wear eye protection, protective clothing, protective gloves P302+P352 - IF ON SKIN: Wash with plenty of soap and water

P321 - Specific treatment (see Section 4)

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse

P501 - Dispose of contents/container according to local, regional, national, territorial,

provincial, and international regulations

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

<u></u>				
Name	Product identifier	% (w/w)	Classification (GHS-US)	
1-Piperazineethanesulfonic acid, 4-(2-	(CAS No) 75277-39-3	1.56	Skin Irrit. 2, H315	
hydroxyethyl)-, monosodium salt			Eye Irrit. 2A, H319	
1-Piperazineethanesulfonic acid, 4-(2-	(CAS No) 7365-45-9	1.42	Skin Irrit. 2, H315	
hydroxyethyl)-			Eye Irrit. 2A, H319	
Sodium chloride	(CAS No) 7647-14-5	1.1	Eye Irrit. 2A, H319	

08/06/2014 EN (English US) 1/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Polyoxyethylene sorbitan monooleate	(CAS No) 9005-65-6	0.13	Eye Irrit. 2B, H320
Albumins, blood serum	(CAS No) 9048-46-8	0.12	Comb. Dust
2-Methyl-3-isothiazolone	(CAS No) 2682-20-4	0.12	Acute Tox. 3 (Oral), H301
			Acute Tox. 3 (Dermal), H311
			Acute Tox. 3 (Inhalation), H331
			Skin Corr. 1B, H314
			Eye Dam. 1, H318
			Skin Sens. 1, H317
			STOT SE 3, H335
			Aquatic Acute 1, H400

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible). **Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing

difficulty persists.

Skin Contact: Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Obtain medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: May cause an allergic skin reaction. **Inhalation:** May cause respiratory irritation. **Skin Contact:** May cause an allergic skin reaction.

Eye Contact: May cause eye irritation.

Ingestion: Ingestion is likely to be harmful or have adverse effects. **Chronic Symptoms:** None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO2). Oxides of iron.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection. **Emergency Procedures:** Stop leak if safe to do so. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical

barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Reference to Other Sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

Specific End Use(s)

For In Vitro diagnostic use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves. Protective clothing.







Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed

established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State : Liquid

Appearance: Not availableOdor: Not availableOdor Threshold: Not availablepH: Not availableRelative Evaporation Rate (butylacetate=1): Not available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Melting Point Not available **Freezing Point** Not available **Boiling Point** Not available **Flash Point** Not available **Auto-ignition Temperature** Not available **Decomposition Temperature** Not available Not available Flammability (solid, gas) **Lower Flammable Limit** Not available **Upper Flammable Limit** Not available **Vapor Pressure** Not available Relative Vapor Density at 20 °C Not available **Relative Density** Not available **Specific Gravity** Not available Solubility Not available Partition coefficient: n-octanol/water Not available Viscosity Not available

Explosion Data – Sensitivity to Mechanical Impact : Not expected to present an explosion hazard due to mechanical impact.

Explosion Data – Sensitivity to Static Discharge : Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Incompatible materials.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

Hazardous Decomposition Products: Carbon oxides (CO, CO2). Oxides of iron.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified LD50 and LC50 Data: Not available Skin Corrosion/Irritation: Not classified Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available **Carcinogenicity:** Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause respiratory irritation. **Symptoms/Injuries After Skin Contact:** May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Sodium chloride (7647-14-5)	
LD50 Oral Rat	3 g/kg
LC50 Inhalation Rat	> 42 g/m³ (Exposure time: 1 h)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ATE US (oral)	3,000.00 mg/kg body weight		
2-Methyl-3-isothiazolone (2682-20-4)			
ATE US (oral)	100.00 mg/kg body weight		
ATE US (dermal)	300.00 mg/kg body weight		
ATE US (dust, mist)	0.50 mg/l/4h		

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not classified

Sodium chloride (7647-14-5)	
LC50 Fish 1	5560 (5560 - 6080) mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-
	through])
EC50 Daphnia 1	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	12946 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 2	340.7 (340.7 - 469.2) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Persistence and Degradability Not available

Bioaccumulative Potential

Sodium chloride (7647-14-5)	
BCF fish 1	(no bioaccumulation)

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

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

Ecology – Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

- **14.1 In Accordance with DOT** Not regulated for transport
- 14.2 In Accordance with IMDG Not regulated for transport
- 14.3 In Accordance with IATA Not regulated for transport
- 14.4 In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

Polyoxyethylene sorbitan monooleate (9005-65-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

US Federal Regulations

<u>OS Federal Regulations</u>			
AccuCardia ELISA HRP-Conjugate			
SARA Section 311/312 Hazard Classes Immediate (acute) health hazard			
1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)- (7365-45-9)			
Listed on the United States TSCA (Toxic Substances Control Act	inventory		
1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)-, monoso	dium salt (75277-39-3)		
Listed on the United States TSCA (Toxic Substances Control Act	inventory		
Albumins, blood serum (9048-46-8)			
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			
2-Methyl-3-isothiazolone (2682-20-4)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			
EPA TSCA Regulatory Flag S - S - indicates a substance that is identified in a proposed or final			
	Significant New Uses Rule.		

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

US State Regulations

Neither this product nor its chemical components appear on any US state lists.

Canadian Regulations

AccuCardia ELISA HRP-Conjugate

WHMIS Classification

Class D Division 2 Subdivision B - Toxic material causing other toxic effects



1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)- (7365-45-9)

Listed on the Canadian DSL (Domestic Substances List) inventory.

1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)-, monosodium salt (75277-39-3)

Listed on Non-Domestic Substances List (NDSL)

Albumins, blood serum (9048-46-8)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Sodium chloride (7647-14-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

2-Methyl-3-isothiazolone (2682-20-4)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Polyoxyethylene sorbitan monooleate (9005-65-6)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 08/06/2014

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H301	Toxic if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H320	Causes eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life

Party Responsible for the Preparation of This Document

Zeus Scientific, Inc. P.O. Box 38 Raritan , NJ 08869 908-526-3744

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS







Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: 08/06/2014 Date of issue: 08/06/2014

Version: 1.0

SECTION 1: IDENTIFICATION

Product Identifier Product Form: Mixture

Product Name: AccuCardia ELISA Controls Product Code: Zeus Part No: 6304-1, 6304-2

Intended Use of the Product For In Vitro diagnostic use only

Name, Address, and Telephone of the Responsible Party

Company

Zeus Scientific, Inc. P.O. Box 38 Raritan, NJ 08869 908-526-3744

Emergency Telephone Number Emergency number : 908-526-3744

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Not classified

Label Elements

GHS-US Labeling

No labeling required

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Name	Product identifier	% (w/w)	Classification (GHS-US)
2-Methyl-3-isothiazolone	(CAS No) 2682-20-4	0.0994	Acute Tox. 3 (Oral), H301
			Acute Tox. 3 (Dermal), H311
			Acute Tox. 3 (Inhalation), H331
			Skin Corr. 1B, H314
			Eye Dam. 1, H318
			Skin Sens. 1, H317
			STOT SE 3, H335
			Aquatic Acute 1, H400

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible). Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing

difficulty persists.

Skin Contact: Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

08/06/2014 EN (English US) 1/5

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Most Important Symptoms and Effects Both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: May cause respiratory irritation. **Skin Contact:** May cause skin irritation. **Eye Contact:** May cause eye irritation.

Ingestion: Ingestion is likely to be harmful or have adverse effects. **Chronic Symptoms:** None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO2). Oxides of iron.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection. **Emergency Procedures:** Stop leak if safe to do so. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Reference to Other Sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Specific End Use(s)

For In Vitro diagnostic use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves.





Materials for Protective Clothing: Not required for normal conditions of use.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed

established Occupational Exposure Limits.

Partition coefficient: n-octanol/water

Viscosity

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State : Liquid (post reconstitution)

Not available **Appearance** Odor Not available Odor Threshold Not available Not available Relative Evaporation Rate (butylacetate=1) Not available **Melting Point** Not available **Freezing Point** Not available Not available **Boiling Point Flash Point** Not available **Auto-ignition Temperature** Not available **Decomposition Temperature** Not available Not available Flammability (solid, gas) **Lower Flammable Limit** Not available **Upper Flammable Limit** Not available **Vapor Pressure** Not available Relative Vapor Density at 20 °C Not available **Relative Density** Not available **Specific Gravity** Not available Solubility Not available

Explosion Data – Sensitivity to Mechanical Impact : Not expected to present an explosion hazard due to mechanical impact.

Explosion Data – Sensitivity to Static Discharge : Not expected to present an explosion hazard due to static discharge.

Not available

Not available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Incompatible materials.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

Hazardous Decomposition Products: Carbon oxides (CO, CO2). Oxides of iron.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified LD50 and LC50 Data: Not available Skin Corrosion/Irritation: Not classified Serious Eye Damage/Irritation: Not classified Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available **Carcinogenicity:** Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause respiratory irritation.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

2-Methyl-3-isothiazolone (2682-20-4)		
ATE US (oral)	100.00 mg/kg body weight	
ATE US (dermal)	300.00 mg/kg body weight	
ATE US (dust, mist)	0.50 mg/l/4h	

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not classified

Persistence and Degradability Not available

Bioaccumulative Potential Not available

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

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

Ecology – Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT
 14.2 In Accordance with IMDG
 14.3 In Accordance with IATA
 14.4 In Accordance with TDG
 Not regulated for transport
 Not regulated for transport
 Not regulated for transport

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Neither this product nor its chemical components appear on any US federal lists.

US State Regulations

Neither this product nor its chemical components appear on any US state lists.

Canadian Regulations

AccuCardia ELISA Controls	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

2-Methyl-3-isothiazolone (2682-20-4)

Listed on the Canadian DSL (Domestic Substances List) inventory.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 08/06/2014

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

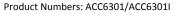
Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Sens. 1	Skin sensitization Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H301	Toxic if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H331	Toxic if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life

Party Responsible for the Preparation of This Document

Zeus Scientific, Inc. P.O. Box 38 Raritan , NJ 08869 908-526-3744

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS







Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: 08/06/2014 Date of issue: 08/06/2014

Version: 1.0

SECTION 1: IDENTIFICATION

<u>Product Identifier</u> <u>Product Form: Mixture</u>

Product Name: AccuCardia ELISA Calibrators

Product Code: Zeus Part No: 6306-A, 6306-B, 6306-C, 6306-D, 6306-E, 6306-F

<u>Intended Use of the Product</u> For In Vitro diagnostic use only

Name, Address, and Telephone of the Responsible Party

Company

Zeus Scientific, Inc. P.O. Box 38 Raritan , NJ 08869 908-526-3744

Emergency Telephone Number Emergency number : 908-526-3744

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US) Skin Sens. 1 H317 Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : H317 - May cause an allergic skin reaction Precautionary Statements (GHS-US) : P261 - Avoid breathing mist, spray, vapors

P272 - Contaminated work clothing should not be allowed out of the workplace

P280 - Wear eye protection, protective clothing, protective gloves P302+P352 - IF ON SKIN: Wash with plenty of soap and water

P321 - Specific treatment (see Section 4)

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse

P501 - Dispose of contents/container according to local, regional, national, territorial,

provincial, and international regulations

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Name	Product identifier	% (w/w)	Classification (GHS-US)
D-Mannitol	(CAS No) 69-65-8	3.73	Comb. Dust
Albumins, blood serum	(CAS No) 9048-46-8	2.4	Comb. Dust
Glycine	(CAS No) 56-40-6	1.6	Not classified
Sodium chloride	(CAS No) 7647-14-5	0.698	Eye Irrit. 2A, H319
2-Methyl-3-isothiazolone	(CAS No) 2682-20-4	0.116	Acute Tox. 3 (Oral), H301

08/06/2014 EN (English US) 1/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

			Acute Tox. 3 (Dermal), H311
			Acute Tox. 3 (Inhalation), H331
			Skin Corr. 1B, H314
			Eye Dam. 1, H318
			Skin Sens. 1, H317
			STOT SE 3, H335
			Aquatic Acute 1, H400
L-Glutamic acid	(CAS No) 56-86-0	0.114	Not classified
Oxirane, methyl-, polymer with oxirane	(CAS No) 9003-11-6	0.114	Aquatic Chronic 3, H412
Tris (hydroxymethyl) aminomethane	(CAS No) 77-86-1	0.097	Skin Irrit. 2, H315
			Eye Irrit. 2A, H319
			STOT SE 3, H335

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

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

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: May cause an allergic skin reaction. **Inhalation:** May cause respiratory irritation. **Skin Contact:** May cause an allergic skin reaction.

Eye Contact: May cause eye irritation.

Ingestion: Ingestion is likely to be harmful or have adverse effects. **Chronic Symptoms:** None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO2).

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical

barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Reference to Other Sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

Specific End Use(s)

For In Vitro diagnostic use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

No occupational exposure limits have been established for this product or its components.

Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves. Protective clothing.







Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed

established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State : Liquid (post reconstitution)

Appearance : Not available
Odor : Not available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Odor Threshold Not available Not available Нα Relative Evaporation Rate (butylacetate=1) Not available **Melting Point** Not available **Freezing Point** Not available **Boiling Point** Not available **Flash Point** Not available **Auto-ignition Temperature** Not available **Decomposition Temperature** Not available Flammability (solid, gas) Not available **Lower Flammable Limit** Not available **Upper Flammable Limit** Not available **Vapor Pressure** Not available Relative Vapor Density at 20 °C Not available Not available **Relative Density** Not available **Specific Gravity** Solubility Not available Partition coefficient: n-octanol/water Not available Viscosity Not available

Explosion Data – Sensitivity to Mechanical Impact : Not expected to present an explosion hazard due to mechanical impact.

Explosion Data – Sensitivity to Static Discharge : Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Incompatible materials.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. **Hazardous Decomposition Products:** Carbon oxides (CO, CO2).

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified LD50 and LC50 Data: Not available Skin Corrosion/Irritation: Not classified Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available **Carcinogenicity:** Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause respiratory irritation. **Symptoms/Injuries After Skin Contact:** May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Tris (hydroxymethyl) aminomethane (77-86-1)				
LD50 Oral Rat	> 5000 mg/kg			
LD50 Dermal Rat	> 5000 mg/kg			
D-Mannitol (69-65-8)				
LD50 Oral Rat	13500 mg/kg			
ATE US (oral)	13,500.00 mg/kg body weight			
Oxirane, methyl-, polymer with oxirane (9003-11-6)				
LC50 Inhalation Rat	320 mg/m³ (Exposure time: 4 h)			
ATE US (vapors)	320.00 mg/l/4h			
ATE US (dust, mist)	320.00 mg/l/4h			
Sodium chloride (7647-14-5)				
LD50 Oral Rat	3 g/kg			
LC50 Inhalation Rat	> 42 g/m³ (Exposure time: 1 h)			
ATE US (oral)	3,000.00 mg/kg body weight			
2-Methyl-3-isothiazolone (2682-20-4)				
ATE US (oral)	100.00 mg/kg body weight			
ATE US (dermal)	300.00 mg/kg body weight			
ATE US (dust, mist)	0.50 mg/l/4h			

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not classified

Sodium chloride (7647-14-5)	
LC50 Fish 1	5560 (5560 - 6080) mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-
	through])
EC50 Daphnia 1	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	12946 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 2	340.7 (340.7 - 469.2) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Persistence and Degradability Not available

Bioaccumulative Potential

Sodium chloride (7647-14-5)	
BCF fish 1	(no bioaccumulation)

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

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

Ecology – Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT Not regulated for transport

14.2 In Accordance with IMDG Not regulated for transport

14.3 In Accordance with IATA Not regulated for transport

14.4 In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

AccuCardia ELISA Calibrators	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

L-Glutamic acid (56-86-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Tris (hydroxymethyl) aminomethane (77-86-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Albumins, blood serum (9048-46-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

D-Mannitol (69-65-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Oxirane, methyl-, polymer with oxirane (9003-11-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Glycine (56-40-6)

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

2-Methyl-3-isothiazolone (2682-20-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory FlagS - S - indicates a substance that is identified in a proposed or final Significant New Uses Rule.

US State Regulations

Not available

Canadian Regulations

AccuCardia ELISA Calibrators	Accu	Cardia	ELISA	Calibrators
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WHMIS Classification Class D Division 2 Subdivision B - Toxic material causing other toxic effects



L-Glutamic acid (56-86-0)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

Tris (hydroxymethyl) aminomethane (77-86-1)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Albumins, blood serum (9048-46-8)

Listed on the Canadian DSL (Domestic Substances List) inventory.

D-Mannitol (69-65-8)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

Oxirane, methyl-, polymer with oxirane (9003-11-6)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

Glycine (56-40-6)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

Sodium chloride (7647-14-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

08/06/2014 EN (English US) 6/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

2-Methyl-3-isothiazolone (2682-20-4)

Listed on the Canadian DSL (Domestic Substances List) inventory.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 08/06/2014

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 3 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H290	May be corrosive to metals
H301	Toxic if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

Party Responsible for the Preparation of This Document

Zeus Scientific, Inc. P.O. Box 38 Raritan , NJ 08869 908-526-3744

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS







Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: 08/06/2014 Date of issue: 08/06/2014

Version: 1.0

SECTION 1: IDENTIFICATION

<u>Product Identifier</u> <u>Product Form: Mixture</u>

Product Name: AccuCardia ELISA Sample Diluent

Product Code: Zeus Part No: 005PLA
Intended Use of the Product
For In Vitro diagnostic use only

Name, Address, and Telephone of the Responsible Party

Company

Zeus Scientific, Inc. P.O. Box 38 Raritan , NJ 08869 908-526-3744

Emergency Telephone Number Emergency number : 908-526-3744

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US) Skin Sens. 1 H317 Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : H317 - May cause an allergic skin reaction Precautionary Statements (GHS-US) : P261 - Avoid breathing mist, spray, vapors

P272 - Contaminated work clothing should not be allowed out of the workplace

P280 - Wear eye protection, protective clothing, protective gloves P302+P352 - IF ON SKIN: Wash with plenty of soap and water

P321 - Specific treatment (see Section 4)

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse

P501 - Dispose of contents/container according to local, regional, national, territorial,

provincial, and international regulations

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

				
Name	Product identifier	% (w/w)	Classification (GHS-US)	
1-Piperazineethanesulfonic acid, 4-(2-	(CAS No) 75277-39-3	1.56	Skin Irrit. 2, H315	
hydroxyethyl)-, monosodium salt			Eye Irrit. 2A, H319	
1-Piperazineethanesulfonic acid, 4-(2-	(CAS No) 7365-45-9	1.42	Skin Irrit. 2, H315	
hydroxyethyl)-			Eye Irrit. 2A, H319	
Sodium chloride	(CAS No) 7647-14-5	1.1	Eye Irrit. 2A, H319	

08/06/2014 EN (English US) 1/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Polyoxyethylene sorbitan monooleate	(CAS No) 9005-65-6	0.13	Eye Irrit. 2B, H320
Albumins, blood serum	(CAS No) 9048-46-8	0.12	Comb. Dust
2-Methyl-3-isothiazolone	(CAS No) 2682-20-4	0.12	Acute Tox. 3 (Oral), H301
			Acute Tox. 3 (Dermal), H311
			Acute Tox. 3 (Inhalation), H331
			Skin Corr. 1B, H314
			Eye Dam. 1, H318
			Skin Sens. 1, H317
			STOT SE 3, H335
			Aquatic Acute 1, H400

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible). **Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing

difficulty persists.

Skin Contact: Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Obtain medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: May cause an allergic skin reaction. **Inhalation:** May cause respiratory irritation. **Skin Contact:** May cause an allergic skin reaction.

Eye Contact: May cause eye irritation.

Ingestion: Ingestion is likely to be harmful or have adverse effects. **Chronic Symptoms:** None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO2). Oxides of iron.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection. **Emergency Procedures:** Stop leak if safe to do so. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical

barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Reference to Other Sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

Specific End Use(s)

For In Vitro diagnostic use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves. Protective clothing.







Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed

established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State : Liquid

Appearance: Not availableOdor: Not availableOdor Threshold: Not availablepH: Not availableRelative Evaporation Rate (butylacetate=1): Not available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Melting Point Not available **Freezing Point** Not available **Boiling Point** Not available **Flash Point** Not available **Auto-ignition Temperature** Not available **Decomposition Temperature** Not available Not available Flammability (solid, gas) **Lower Flammable Limit** Not available **Upper Flammable Limit** Not available **Vapor Pressure** Not available Relative Vapor Density at 20 °C Not available **Relative Density** Not available **Specific Gravity** Not available Solubility Not available Partition coefficient: n-octanol/water Not available Viscosity Not available

Explosion Data – Sensitivity to Mechanical Impact : Not expected to present an explosion hazard due to mechanical impact.

Explosion Data – Sensitivity to Static Discharge : Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Incompatible materials.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

Hazardous Decomposition Products: Carbon oxides (CO, CO2). Oxides of iron.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified LD50 and LC50 Data: Not available Skin Corrosion/Irritation: Not classified Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available **Carcinogenicity:** Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause respiratory irritation. **Symptoms/Injuries After Skin Contact:** May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Sodium chloride (7647-14-5)	
LD50 Oral Rat	3 g/kg
LC50 Inhalation Rat	> 42 g/m³ (Exposure time: 1 h)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ATE US (oral)	3,000.00 mg/kg body weight
2-Methyl-3-isothiazolone (2682-20-4)	
ATE US (oral)	100.00 mg/kg body weight
ATE US (dermal)	300.00 mg/kg body weight
ATE US (dust, mist)	0.50 mg/l/4h

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not classified

Sodium chloride (7647-14-5)	
LC50 Fish 1	5560 (5560 - 6080) mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-
	through])
EC50 Daphnia 1	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	12946 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 2	340.7 (340.7 - 469.2) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Persistence and Degradability Not available

Bioaccumulative Potential

Sodium chloride (7647-14-5)	
BCF fish 1	(no bioaccumulation)

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

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

Ecology – Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

- **14.1 In Accordance with DOT** Not regulated for transport
- 14.2 In Accordance with IMDG Not regulated for transport
- 14.3 In Accordance with IATA Not regulated for transport
- 14.4 In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

Polyoxyethylene sorbitan monooleate (9005-65-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

US Federal Regulations

US Federal Regulations		
AccuCardia ELISA Sample Diluent		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	
1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)- (7365-45-9)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)-, monosodium salt (75277-39-3)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Albumins, blood serum (9048-46-8)		
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		
2-Methyl-3-isothiazolone (2682-20-4)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
EPA TSCA Regulatory Flag	S - S - indicates a substance that is identified in a proposed or final	
	Significant New Uses Rule.	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

US State Regulations

Neither this product nor its chemical components appear on any US state lists.

Canadian Regulations

AccuCardia ELISA Sample Diluent

WHMIS Classification

Class D Division 2 Subdivision B - Toxic material causing other toxic effects



1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)- (7365-45-9)

Listed on the Canadian DSL (Domestic Substances List) inventory.

1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)-, monosodium salt (75277-39-3)

Listed on Non-Domestic Substances List (NDSL)

Albumins, blood serum (9048-46-8)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Sodium chloride (7647-14-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

2-Methyl-3-isothiazolone (2682-20-4)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Polyoxyethylene sorbitan monooleate (9005-65-6)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 08/06/2014

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H301	Toxic if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H320	Causes eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life

Party Responsible for the Preparation of This Document

Zeus Scientific, Inc. P.O. Box 38 Raritan , NJ 08869 908-526-3744

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS







Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: 09/22/2014 Date of issue: 09/22/2014

Version: 1.0

SECTION 1: IDENTIFICATION

<u>Product Identifier</u> <u>Product Form: Mixture</u>

Product Name: AccuCardia ELISA TMB
Product Code: Zeus Part No: 002PLA
Intended Use of the Product
For In Vitro diagnostic use only

Name, Address, and Telephone of the Responsible Party

Company

Zeus Scientific, Inc. P.O. Box 38 Raritan , NJ 08869 908-526-3744

Emergency Telephone Number Emergency number : 908-526-3744

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Not classified

Label Elements

GHS-US Labeling

No labeling required

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200] and the Canadian Hazardous Products Act (HPA): this product and its components which at their given concentrations, are not considered hazardous.

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible). **Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: May cause respiratory irritation. **Skin Contact:** May cause skin irritation. **Eye Contact:** May cause eye irritation.

Ingestion: Ingestion is likely to be harmful or have adverse effects. **Chronic Symptoms:** None expected under normal conditions of use.

09/22/2014 EN (English US) 1/5

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO2).

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection. **Emergency Procedures:** Stop leak if safe to do so. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical

barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Reference to Other Sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

Specific End Use(s)

For In Vitro diagnostic use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves.



Viscosity



Materials for Protective Clothing: Not required for normal conditions of use.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed

established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State Liauid **Appearance** Not available Not available Odor **Odor Threshold** Not available рΗ Not available Relative Evaporation Rate (butylacetate=1) Not available **Melting Point** Not available **Freezing Point** Not available **Boiling Point** 100°C/212°F **Flash Point** Not available **Auto-ignition Temperature** Not available **Decomposition Temperature** Not available Flammability (solid, gas) Not available **Lower Flammable Limit** Not available **Upper Flammable Limit** Not available **Vapor Pressure** Not available Relative Vapor Density at 20 °C Not available **Relative Density** Not available Not available **Specific Gravity** Dilutable Solubility Partition coefficient: n-octanol/water Not available

Explosion Data – Sensitivity to Mechanical Impact : Not expected to present an explosion hazard due to mechanical impact. Explosion Data – Sensitivity to Static Discharge : Not expected to present an explosion hazard due to static discharge.

Not available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Incompatible materials.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. **Hazardous Decomposition Products:** Carbon oxides (CO, CO2).

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified
LD50 and LC50 Data: Not available
Skin Corrosion/Irritation: Not classified
Serious Eye Damage/Irritation: Not classified
Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available **Carcinogenicity:** Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause respiratory irritation. Symptoms/Injuries After Skin Contact: May cause skin irritation. Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data: Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not classified

Persistence and Degradability Not available

Bioaccumulative Potential Not available

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

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

Ecology – Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT
 14.2 In Accordance with IMDG
 14.3 In Accordance with IATA
 Not regulated for transport
 14.3 In Accordance with IATA

14.4 In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Neither this product nor its chemical components appear on any US federal lists.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

US State Regulations

Neither this product nor its chemical components appear on any US state lists.

Canadian Regulations

AccuCardia ELISA TMB	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 09/22/2014

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200.

Party Responsible for the Preparation of This Document

Zeus Scientific, Inc. P.O. Box 38 Raritan , NJ 08869 908-526-3744

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS





* * * Section 1 - Product and Company Identification * * *

Material Name: ZEUS ELISA Stop Solution

Product Use: For In Vitro diagnostic use only

Manufacturer Information

Zeus Scientific, Inc. P.O. Box 38 Raritan, NJ 08869 Phone: 908-526-3744

* * * Section 2 - Hazards Identification * * *

GHS Classification:

Acute Toxicity Inhalation - Category 4 Skin Corrosion/Irritation - Category 1A

GHS LABEL ELEMENTS Symbol(s)



Signal Word

Danger

Hazard Statements

Harmful if inhaled.

Causes severe skin burns and eye damage.

Precautionary Statements

Prevention

Do not breathe mist/vapours/spray.

Use in a well-ventilated area.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Material Name: ZEUS ELISA Stop Solution

Immediately call a POISON CENTER or doctor/physician.

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 3 - Composition / Information on Ingredients * * *

CAS#	Component
7732-18-5	Water
7647-01-0	Hydrogen chloride
7664-93-9	Sulfuric acid

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention.

First Aid: Skin

For skin contact flush with large amounts of water. Seek medical attention. Wash contaminated clothing before reuse.

First Aid: Ingestion

If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting.

First Aid: Inhalation

Move person to non-contaminated air. If the affected person is not breathing, apply artificial respiration.

* * * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

See Section 9 for Flammability Properties.

None

Hazardous Combustion Products

Carbon dioxide may emit trace amounts of toxic vapors and fumes.

Extinguishing Media

Use appropriate extinguishing media for surrounding fire.

Unsuitable Extinguishing Media

None

Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

* * * Section 6 - Accidental Release Measures * * *

Recovery and Neutralization

None

Materials and Methods for Clean-Up

Attempt to reclaim the free product, if this is possible.

Material Name: ZEUS ELISA Stop Solution

Emergency Measures

Isolate area. Keep unnecessary personnel away.

Personal Precautions and Protective Equipment

Wear appropriate personal protective equipment.

Environmental Precautions

None

Prevention of Secondary Hazards

None

* * * Section 7 - Handling and Storage * * *

Handling Procedures

Wash thoroughly after handling.

Storage Procedures

Maintain containers in a cool, well-ventilated area which is protected from light. Containers should remain sealed while in storage.

Incompatibilities

Avoid contact with strong oxidizing agents and metals.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Component Exposure Limits

Hydrogen chloride (231-595-7)

ACGIH: 2 ppm Ceiling

Austria: 10 ppm STEL [KZW] (8 X 5 min); 15 mg/m3 STEL [KZW] (8 X 5 min)

5 ppm TWA [TMW]; 8 mg/m3 TWA [TMW]

Belgium: 10 ppm STEL; 15 mg/m3 STEL

5 ppm TWA; 8 mg/m3 TWA

Denmark: 5 ppm Ceiling; 8 mg/m3 Ceiling

Finland: 5 ppm STEL (including solution); 7.6 mg/m3 STEL (including solution)

France: 5 ppm STEL [VLCT]; 7.6 mg/m3 STEL [VLCT]

Germany: 2 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and

BGW values are observed, exposure factor 2); 3 mg/m3 TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2)

2 ppm TWA MAK; 3.0 mg/m3 TWA MAK

4 ppm Peak; 6 mg/m3 Peak

Greece: 5 ppm STEL; 7 mg/m3 STEL

5 ppm TWA; 7 mg/m3 TWA 10 ppm STEL; 15 mg/m3 STEL

Ireland: 10 ppm STEL; 15 mg/m3 STEL 5 ppm TWA; 8 mg/m3 TWA

Italy: 5 ppm TWA; 8 mg/m3 TWA

Netherlands: 15 mg/m3 STEL

8 mg/m3 TWA

Spain: 10 ppm STEL [VLA-EC]; 15 mg/m3 STEL [VLA-EC]

5 ppm TWA [VLA-ED] (indicative limit value); 7.6 mg/m3 TWA [VLA-ED] (indicative limit value)

Sweden: 5 ppm CLV; 8 mg/m3 CLV

Material Name: ZEUS ELISA Stop Solution

Sulfuric acid (231-639-5)

ACGIH: 0.2 mg/m3 TWA (thoracic fraction)

Austria: 0.2 mg/m3 STEL [KZW] (inhalable fraction)

0.1 mg/m3 TWA [TMW] (inhalable fraction)

Belgium: 3 mg/m3 STEL

1 mg/m3 TWA

Denmark: 0.05 mg/m3 TWA (thoracic fraction, mist)

Finland: 0.1 mg/m3 STEL

0.05 mg/m3 TWA

France: 3 mg/m3 STEL [VLCT]

0.05 mg/m3 TWA [VME]

Germany: 0.1 mg/m3 TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW

and BGW values are observed, inhalable fraction, exposure factor 1)

0.1 mg/m3 TWA MAK (inhalable fraction)0.1 mg/m3 Peak (inhalable fraction)

Greece: 0.05 mg/m3 TWA (mist)

Ireland: 1 mg/m3 TWA
Netherlands: 0.05 mg/m3 TWA

Portugal: 0.2 mg/m3 TWA [VLE-MP] (thoracic fraction)

Spain: 0.05 mg/m3 TWA [VLA-ED] (indicative limit value; it is prohibited the partial or complete

commercialization or use of this substance as a phytosanitary or biocide compound; limitations

and interferences can arise from other Sulfur compounds, mist)

Sweden: 0.1 mg/m3 LLV

0.2 mg/m3 STV

Engineering Measures

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Personal Protective Equipment: Respiratory

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: Hands

Use impervious gloves.

Personal Protective Equipment: Eyes

Wear safety glasses with side shields.

Personal Protective Equipment: Skin and Body

Lab coat should be worn to minimize skin contact.

Material Name: ZEUS ELISA Stop Solution

Section 9 - Physical & Chemical Properties

Appearance: Semi-Clear Odor: None Physical State: Liquid pH: ND Vapor Pressure: ND Vapor Density: ND Boiling Point: ND Melting Point: NA Specific Gravity: ND Solubility (H2O): ND Evaporation Rate: ND VOC: ND Octanol/H2O Coeff.: ND Flash Point: NA Flash Point Method: NA Upper Flammability Limit NA

(UFL):

Lower Flammability Limit NA Burning Rate: NA

> (LFL): Auto Ignition: NA

Section 10 - Chemical Stability & Reactivity Information

Chemical Stability

This is a stable material.

Hazardous Reaction Potential

Will not occur.

Conditions to Avoid

None

Incompatible Products

Avoid contact with strong oxidizing agents and metals.

Hazardous Decomposition Products

Irritating toxic fumes and gases, oxides of carbon.

Section 11 - Toxicological Information

Acute Toxicity

Component Analysis - LD50/LC50

Water (7732-18-5)

Oral LD50 Rat >90 mL/kg

Hydrogen chloride (7647-01-0)

Inhalation LC50 Rat 3124 ppm 1 h; Oral LD50 Rat 700 mg/kg; Dermal LD50 Rabbit >5010 mg/kg

Sulfuric acid (7664-93-9)

Inhalation LC50 Mouse 320 mg/m3 2 h; Inhalation LC50 Rat 510 mg/m3 2 h; Inhalation LC50 Rat 347 ppm 1 h; Oral LD50 Rat 2140 mg/kg

Potential Health Effects: Skin Corrosion Property/Stimulativeness

Causes severe skin burns.

Potential Health Effects: Eye Critical Damage/ Stimulativeness

Causes eye damage.

Material Name: ZEUS ELISA Stop Solution

Potential Health Effects: Ingestion

May be harmful if swallowed.

Potential Health Effects: Inhalation

Harmful if inhaled.

Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any sensitization effects.

Generative Cell Mutagenicity

This product is not reported to have any mutagenic effects.

Carcinogenicity

A: General Product Information

This product is not reported to have any carcinogenic effects.

B: Component Carcinogenicity

Hydrogen chloride (7647-01-0)

ACGIH: A4 - Not Classifiable as a Human Carcinogen IARC: Monograph 54 [1992] (Group 3 (not classifiable))

Sulfuric acid (7664-93-9)

ACGIH: A2 - Suspected Human Carcinogen (contained in strong inorganic acid mists)

IARC: Monograph 54 [1992] (Occupational exposure to mists and vapours from sulfuric acid and other

strong inorganic acids) (Group 1 (carcinogenic to humans))

Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

Specified Target Organ General Toxicity: Single Exposure

This product is not reported to have any specific target organ toxicity single exposure effects.

Specified Target Organ General Toxicity: Repeated Exposure

This product is not reported to have any specific target organ toxicity repeat exposure effects.

Aspiration Respiratory Organs Hazard

Not an aspiration hazard.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

This product is not reported to have any ecotoxicity effects.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Hydrogen chloride (7647-01-0)

Test & Species Conditions

96 Hr LC50 Gambusia affinis 282 mg/L [static]

Sulfuric acid (7664-93-9)

Test & Species Conditions

96 Hr LC50 Brachydanio rerio >500 mg/L [static]

24 Hr EC50 Daphnia magna 29 mg/L

Material Name: ZEUS ELISA Stop Solution

Persistence/Degradability

No information available for the product.

Bioaccumulation

No information available for the product.

Mobility in Soil

No information available for the product.

* * * Section 13 - Disposal Considerations * * *

Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Disposal of Contaminated Containers or Packaging

Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 14 - Transportation Information * * *

IATA Information

Shipping Name: Not Regulated

ICAO Information

Shipping Name: Not Regulated

IMDG Information

Shipping Name: Not Regulated

* * * Section 15 - Regulatory Information * * *

Regulatory Information

EU MARKING AND LABELLING:

Symbol(s):

Χi

Risk Phrases:

R36/37/38 Irritating to eyes, respiratory system and skin. Irritating to eyes, respiratory system and skin.

Material Name: ZEUS ELISA Stop Solution

Substance Analysis - Inventory

Component/CAS	EC #	EEC	CAN	TSCA
Water	231-791-2	EINECS	DSL	Yes
7732-18-5				
Hydrogen chloride	231-595-7	EINECS	DSL	Yes
7647-01-0				
Sulfuric acid	231-639-5	EINECS	DSL	Yes
7664-93-9				

* * * Section 16 - Other Information * * *

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EU = European Union; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average

Literature References

Available on request.

End of Sheet





* * * Section 1 - Product and Company Identification * * *

Material Name: ZEUS ELISA Wash Buffer (0008L)

Product Use: For In Vitro diagnostic use only

Manufacturer Information

Zeus Scientific, Inc. P.O. Box 38 Raritan , NJ 08869 Phone: 908-526-3744

* * * Section 2 - Hazards Identification * * *

GHS Classification:

Not classified in accordance to EC No. 1272/2008.

GHS LABEL ELEMENTS

Symbol(s)

None

Signal Word

None

Hazard Statements

None

Precautionary Statements

None

* * * Section 3 - Composition / Information on Ingredients * * *

CAS#	Component
7732-18-5	Water
9005-64-5	Polyoxyethylene sorbitan monolaurate
7647-14-5	Sodium chloride
7778-77-0	Dihydrogen potassium phosphate
7558-79-4	Sodium phosphate dibasic
314-13-6	Direct blue 53
2682-20-4	2-Methyl-3-isothiazolone

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists get medical attention.

First Aid: Skin

For skin contact, wash immediately with soap and water. If irritation persists, get medical attention.

Material Name: ZEUS ELISA Wash Buffer (0008L)

First Aid: Ingestion

If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting.

First Aid: Inhalation

Move person to non-contaminated air. If the affected person is not breathing, apply artificial respiration.

* * * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

See Section 9 for Flammability Properties.

None

Hazardous Combustion Products

Carbon dioxide may emit trace amounts of toxic vapors and fumes.

Extinguishing Media

Use appropriate extinguishing media for surrounding fire.

Unsuitable Extinguishing Media

None

Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

* * * Section 6 - Accidental Release Measures * * *

Recovery and Neutralization

None

Materials and Methods for Clean-Up

Attempt to reclaim the free product, if this is possible.

Emergency Measures

Isolate area. Keep unnecessary personnel away.

Personal Precautions and Protective Equipment

None necessary.

Environmental Precautions

None

Prevention of Secondary Hazards

None

* * * Section 7 - Handling and Storage * * *

Handling Procedures

Wash thoroughly after handling.

Storage Procedures

Maintain containers in a cool, well-ventilated area which is protected from light. Containers should remain sealed while in storage.

Incompatibilities

Avoid contact with strong oxidizing agents, metals, strong acids, and strong bases.

Material Name: ZEUS ELISA Wash Buffer (0008L)

* * * Section 8 - Exposure Controls / Personal Protection

Component Exposure Limits

2-Methyl-3-isothiazolone (220-239-6)

Austria: 0.05 mg/m3 TWA [TMW]

skin notation

0.2 mg/m3 TWA MAK (mixture in ratio 1:3 with CAS #26172-55-4, inhalable fraction) Germany:

0.4 mg/m3 Peak (mixture in ratio 1:3 with CAS #26172-55-4, inhalable fraction)

Engineering Measures

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Personal Protective Equipment: Respiratory

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: Hands

Use impervious gloves.

Personal Protective Equipment: Eyes

Wear safety glasses with side shields.

Personal Protective Equipment: Skin and Body

Lab coat should be worn to minimize skin contact.

Section 9 - Physical & Chemical Properties

Appearance: Semi-Clear Odor: None Physical State: Liquid pH: ND Vapor Pressure: ND Vapor Density: ND **Boiling Point: ND** Melting Point: NA Solubility (H2O): ND Specific Gravity: Evaporation Rate: ND VOC: ND Octanol/H2O Coeff.: ND Flash Point: Flash Point Method: NA Upper Flammability Limit NA (UFL):

Lower Flammability Limit NA Burning Rate: NA

(LFL):

Auto Ignition: NA

Section 10 - Chemical Stability & Reactivity Information

Chemical Stability

This is a stable material.

Hazardous Reaction Potential

Will not occur.

Conditions to Avoid

None

Incompatible Products

Avoid contact with strong oxidizing agents, metals, strong acids, and strong bases.

Hazardous Decomposition Products

Irritating toxic fumes and gases, oxides of carbon.

Material Name: ZEUS ELISA Wash Buffer (0008L)

* * * Section 11 - Toxicological Information * * *

Acute Toxicity

Component Analysis - LD50/LC50

Water (7732-18-5)

Oral LD50 Rat >90 mL/kg

Polyoxyethylene sorbitan monolaurate (9005-64-5)

Oral LD50 Rat 36700 µL/kg

Sodium phosphate dibasic (7558-79-4)

Oral LD50 Rat 17 g/kg

Dihydrogen potassium phosphate (7778-77-0)

Dermal LD50 Rabbit >4640 mg/kg; Oral LD50 Mouse 1700 mg/kg

Sodium chloride (7647-14-5)

Inhalation LC50 Rat >42 g/m3 1 h; Oral LD50 Rat 3 g/kg; Dermal LD50 Rabbit >10 g/kg

Potential Health Effects: Skin Corrosion Property/Stimulativeness

This product is not reported to have any skin irritation effects.

Potential Health Effects: Eye Critical Damage/ Stimulativeness

This product is not reported to have any eye irritation effects.

Potential Health Effects: Ingestion

May be harmful if swallowed.

Potential Health Effects: Inhalation

This product is not reported to have any inhalation hazard effects.

Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any sensitization effects.

Generative Cell Mutagenicity

This product is not reported to have any mutagenic effects.

Carcinogenicity

A: General Product Information

This product is not reported to have any carcinogenic effects.

B: Component Carcinogenicity

Direct blue 53 (314-13-6)

IARC: Supplement 7 [1987]; Monograph 8 [1975] (Group 3 (not classifiable))

Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

Specified Target Organ General Toxicity: Single Exposure

This product is not reported to have any specific target organ toxicity single exposure effects.

Material Name: ZEUS ELISA Wash Buffer (0008L)

Specified Target Organ General Toxicity: Repeated Exposure

This product is not reported to have any specific target organ toxicity repeat exposure effects.

Aspiration Respiratory Organs Hazard

Not an aspiration hazard.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

This product is not reported to have any ecotoxicity effects.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Sodium chloride (7647-14-5)

Test & Species		Conditions
96 Hr LC50 Lepomis macrochirus	5560 - 6080 mg/L	
	[flow-through]	
96 Hr LC50 Lepomis macrochirus	12946 mg/L [static]	
96 Hr LC50 Pimephales promelas	6020 - 7070 mg/L	
	[static]	
96 Hr LC50 Pimephales promelas	7050 mg/L [semi-	
	static]	
96 Hr LC50 Pimephales promelas	6420 - 6700 mg/L	
	[static]	
96 Hr LC50 Oncorhynchus mykiss	4747 - 7824 mg/L	
	[flow-through]	
48 Hr EC50 Daphnia magna	1000 mg/L	

Persistence/Degradability

48 Hr EC50 Daphnia magna

No information available for the product.

Bioaccumulation

No information available for the product.

Mobility in Soil

No information available for the product.

* * * Section 13 - Disposal Considerations * * *

Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Disposal of Contaminated Containers or Packaging

Dispose of contents/container in accordance with local/regional/national/international regulations.

340.7 - 469.2 mg/L

[Static]

* * * Section 14 - Transportation Information * * *

IATA Information

Shipping Name: Not Regulated

ICAO Information

Shipping Name: Not Regulated

Material Name: ZEUS ELISA Wash Buffer (0008L)

IMDG Information

Shipping Name: Not Regulated

* * * Section 15 - Regulatory Information * * *

Regulatory Information

EU MARKING AND LABELLING:

Symbol(s):

None

Risk Phrases:

None

Substance Analysis - Inventory

Component/CAS	EC#	EEC	CAN	TSCA
Water	231-791-2	EINECS	DSL	Yes
7732-18-5				
Polyoxyethylene sorbitan monolaurate	500-018-3	No	DSL	Yes
9005-64-5				
Sodium phosphate dibasic	231-448-7	EINECS	DSL	Yes
7558-79-4				
Dihydrogen potassium phosphate	231-913-4	EINECS	DSL	Yes
7778-77-0				
Sodium chloride	231-598-3	EINECS	DSL	Yes
7647-14-5				
Direct blue 53	206-242-5	EINECS	DSL	Yes
314-13-6				
2-Methyl-3-isothiazolone	220-239-6	EINECS	DSL	Yes
2682-20-4				

* * * Section 16 - Other Information * * *

Key/Legend

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Literature References

Available on request.