

SAFETY DATA SHEET

1. Identification

Product identifier CircuLex S100A9/MRP14 ELISA Kit

Stop Solution

Other means of identification

Product code CY-8062

Recommended use Research use only. **Recommended restrictions** None known.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer andMedical & Biological Laboratories (MBL) Co., Ltd.Supplier (Asia)4-5-3 Sakae, Naka-ku, Nagoya, Aichi 460-0008, JapanTelephone number+81-52-238-1901 (Monday to Friday, 9 AM to 5 PM JST)

Fax +81-52-238-1440 **E-mail** sds-support@mbl.co.jp

URL http://www.mbl.co.jp/e/index.html

Contact person SDS Support

Supplier MBL International Corporation

15A Constitution Way, Woburn, MA 01801, USA

Telephone number +1-800-200-5459, option 3

Fax +1-781-939-6963
E-mail tech@mblintl.com
URL http://www.mblintl.com/
Contact person Technical Service

2. Hazard(s) identification

Physical hazards Not classified.

Health hazardsSkin corrosion/irritationCategory 1Serious eye damage/eye irritationCategory 1

OSHA hazard(s) Not classified.

Label elements

Hazard symbol



Signal word Danger

Hazard statement Causes severe skin burns and eye damage.

Precautionary statement

Prevention Do not breathe dust or mist. Wear protective gloves/protective clothing/eye protection/face

protection. Wash thoroughly after handling.

Response IF SWALLOWED: Rinse mouth. Do not induce vomiting. IF ON SKIN (or hair): Take off

immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

Storage Store locked up.

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

regulations.

Hazard(s) not otherwise

classified (HNOC)

None.

3. Composition/Information on ingredients

Mixtures

Chemical name	CAS number %		
Sulfuric acid	7664-93-9 < 10		
Composition comments	All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.		
4. First-aid measures			
Inhalation	Move injured person into fresh air and keep person calm under observation. If breathing is difficult, trained personnel should give oxygen. Get medical attention if any discomfort continues.		
Skin contact	Take off immediately all contaminated clothing. Flush skin thoroughly with water. Get medical attention immediately. Chemical burns must be treated by a physician.		
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove any contact lenses and open eyelids wide apart. Continue rinsing. Get medical attention immediately.		
Ingestion	Rinse mouth thoroughly. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention if any discomfort continues.		
Most important symptoms/ effects, acute and delayed	Burning pain and severe corrosive skin damage. Extreme irritation of eyes and mucous membranes, including burning and tearing.		
Indication of immediate medical attention and special treatment needed	Treat symptomatically.		

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

General information

media

Use fire-extinguishing media appropriate for surrounding materials.

First aid personnel must be aware of own risk during rescue.

None known.

the chemical

Specific hazards arising from By heating and fire, harmful vapors/gases may be formed.

and precautions for firefighters

Special protective equipment Self-contained breathing apparatus and full protective clothing should be worn when fighting chemical fires. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

Fire-fighting equipment/

instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid inhalation of spray mist and contact with skin and eyes. Wear appropriate personal

protective equipment.

Methods and materials for containment and cleaning up

Absorb spillage with non-combustible, absorbent material. Collect in containers and seal

securely.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Avoid inhalation of spray mist and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene

Conditions for safe storage, including any

incompatibilities

Keep container closed. Do not store near heat sources or expose to high temperatures.

Protect from direct sunlight.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	
Sulfuric acid (CAS 7664-93-9)	PEL	1 mg/m3	_

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Sulfuric acid (CAS 7664-93-9)	TWA	0.2 mg/m3	Thoracic fraction

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	
Sulfuric acid (CAS 7664-93-9)	REL	1 mg/m3	

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Provide easy access to water supply and eye wash facilities.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear approved chemical safety goggles.

Skin protection

Hand protection Use suitable protective gloves if risk of skin contact. Butyl rubber gloves are recommended,

but be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Suitable gloves can be recommended by the glove supplier.

Wear protective clothing appropriate for the risk of exposure. Other

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

respiratory protection. Chemical respirator with acid gas cartridge.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and

protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid. **Form** Liquid. Color Colorless. Odor Odorless. Not available. **Odor threshold** На Not available. Not available. Melting point/freezing point Initial boiling point and Not available.

boiling range

Flash point Not available. **Evaporation rate** Not available. Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits Flammability limit Not available.

- lower (%)

Flammability limit Not available.

- upper (%)

Not available. Vapor pressure Not available. Vapor density Not available. Relative density Soluble in water. Solubility(ies) **Partition coefficient** Not available.

(n-octanol/water)

Not available. **Auto-ignition temperature Decomposition temperature** Not available. **Viscosity** Not available.

10. Stability and reactivity

Reacts violently with strong bases. Reactivity

Chemical stability Stable under normal temperature conditions. Possibility of hazardous

reactions

This product may react with reducing agents.

Conditions to avoid

Incompatible materials

Sunlight. Heat. Freezing. Reducing agents. Alkalis. Metals.

Hazardous decomposition

products

Sulfur dioxide.

11. Toxicological information

Information on likely routes of exposure

May cause discomfort if swallowed. Ingestion may cause nausea, headache and dizziness. Ingestion

Inhalation Spray mists may cause respiratory tract irritation.

Skin contact Causes skin burns. Causes severe eye burns. Eye contact

Symptoms related to the physical, chemical and

Burning pain and severe corrosive skin damage. Extreme irritation of eyes and mucous

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membranes, including burning and tearing.

toxicological characteristics

Information on toxicological effects

Acute toxicity Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly

the digestive tract.

Components **Species Test Results** Sulfuric acid (CAS 7664-93-9) Acute LD50 Rat 2,140 mg/kg Oral

Skin corrosion/irritation

Serious eye damage/eye

irritation

Causes severe skin burns.

Causes eye burns.

No data available. Respiratory sensitization Skin sensitization No data available. Germ cell mutagenicity No data available.

Exposure to strong inorganic acid mists containing sulfuric acid has been classified as Carcinogenicity

carcinogenic to humans. The information located is insufficient to conclude that sulfuric acid

itself is a carcinogen.

Reproductive toxicity Specific target organ toxicity No data available. No data available.

- single exposure

Specific target organ toxicity

No data available.

- repeated exposure

Aspiration hazard No data available.

12. Ecological information

Ecotoxicity Large amounts of the product may affect the acidity (pH-factor) in water with possible risk of

harmful effects to aquatic organisms.

Components **Species Test Results** Sulfuric acid (CAS 7664-93-9) Aquatic Fish LC50 Western mosquitofish (Gambusia affinis) 42 mg/L, 96 hours

Persistence and degradability No data available. No data available. **Bioaccumulative potential** Mobility in soil No data available.

Mobility in general The product is water soluble and may spread in water systems.

Other adverse effects None known.

13. Disposal considerations

Disposal instructions Dispose of in accordance with all applicable regulations. Do not discharge into drains, water

courses or onto the ground.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code D002: Corrosive waste

Waste from residues / unused Dispose of in accordance with local regulations.

products

Contaminated packaging Dispose of in same manner as unused product.

14. Transport information

DOT

UN number UN2796

UN proper shipping name Sulphuric acid solution

Transport hazard class(es) 8
Subsidiary class(es) Packing group ||

Special precautions for user Read safety instructions, SDS and emergency procedures before

handling.

Labels required 8

Special provisions A3, A7, B2, B15, IB2, N6, N34, T8, TP2, TP12

Packaging exceptions 154
Packaging non bulk 202
Packaging bulk 242

IATA

UN number UN2796

UN proper shipping name Sulphuric acid solution

Transport hazard class(es) 8
Subsidiary class(es) Packaging group II
Environmental hazards No
Labels required 8
ERG Code 8L

Special precautions for user Read safety instructions, SDS and emergency procedures before

handling.

IMDG

UN number UN2796

UN proper shipping name Sulphuric acid solution

Transport hazard class(es) 8
Subsidiary class(es) Packaging group ||

Marine pollutantNoLabels required8

EmS F-A, S-B

Special precautions for user Read safety instructions, SDS and emergency procedures before

handling.

Transport in bulk according to Annex II of

MARPOL 73/78 and the IBC Code

Environmental hazards

Not applicable.

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4) Sulfuric acid (CAS 7664-93-9) Listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

6552

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

No
SARA 311/312 Hazardous chemical

Yes

SARA 313 (TRI reporting) Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Sulfuric acid

(CAS 7664-93-9)

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential

Sulfuric acid (CAS 7664-93-9)

Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical

Drug Enforcement Administration (DEA). List 1 & 2 Exempt

Code Number

Sulfuric acid (CAS 7664-93-9) 20%W/V

Chemical Mixtures (21 CFR 1310.12(c))

DEA Exempt Chemical Mixtures Code NumberSulfuric acid (CAS 7664-93-9) 6552

US state regulations WARNING: This product contains a chemical known to the State of California to cause

Massachusetts RTK - Substance List Sulfuric acid (CAS 7664-93-9)

New Jersey Worker and Community Right-to-Know Act Sulfuric acid (CAS 7664-93-9) 500 lbs

Pennsylvania RTK - Hazardous Substances

Sulfuric acid (CAS 7664-93-9)

Rhode Island RTK

Sulfuric acid (CAS 7664-93-9)

California Proposition 65 - Carcinogens & Reproductive Toxicity

Sulfuric acid (CAS 7664-93-9)

(CRT)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	EC Inventory	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PIC	CS) Yes
United States & Puerto	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

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List of abbreviations LC50: Lethal Concentration, 50%.

LD50: Lethal Dose, 50%.

Further information Not available.
References IUCLID (2000)

RTECS (2006, 2008)

Disclaimer This information is provided without warranty. The information is believed to be correct. This

information should be used to make an independent determination of the methods to

safeguard workers and the environment.



SAFETY DATA SHEET

1. Identification

Product identifier CircuLex S100A9/MRP14 ELISA Kit

Sample Dilution Buffer, Standard Dilution Buffer

Other means of identification

Product code CY-8062

Recommended use Research use only.

Recommended restrictions None known.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer andMedical & Biological Laboratories (MBL) Co., Ltd.Supplier (Asia)4-5-3 Sakae, Naka-ku, Nagoya, Aichi 460-0008, JapanTelephone number+81-52-238-1901 (Monday to Friday, 9 AM to 5 PM JST)

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Contact person SDS Support

Supplier MBL International Corporation

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E-mail tech@mblintl.com
URL http://www.mblintl.com/
Contact person Technical Service

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Not classified.
OSHA hazard(s) Not classified.

Label elements

Hazard symbolNone.Signal wordNone.Hazard statementNone.Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

None.

Supplemental information None.

3. Composition/Information on ingredients

Mixtures

Chemical name	CAS number	%
Sodium azide	26628-22-8	< 0.1

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations

are in percent by volume.

4. First-aid measures

Inhalation Move to fresh air. Get medical attention if any discomfort continues.

Skin contact Remove contaminated clothing. Wash skin with soap and water. Get medical attention if

irritation develops or persists.

Eye contact Rinse immediately with plenty of water, also under the eyelids. Get medical attention if

irritation develops or persists.

Ingestion Rinse mouth thoroughly. Get medical attention if any discomfort occurs.

Most important symptoms/ effects, acute and delayed Indication of immediate

Dry skin.

medical attention and special

Treat symptomatically.

treatment needed **General information**

Get medical attention if any discomfort develops.

5. Fire-fighting measures

Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

None known.

media

Specific hazards arising from None known.

the chemical

and precautions for

Special protective equipment Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire.

firefighters Fire-fighting equipment/

instructions

Move containers from fire area if you can do it without risk. Use water spray to cool

unopened containers. Prevent entry to sewers and public waters.

General fire hazards The product is non-combustible.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid inhalation of mist and contact with skin and eyes. For personal protection, see Section

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8 of the SDS.

Methods and materials for containment and cleaning up **Environmental precautions**

Absorb spillage with suitable absorbent material. After removal, flush contaminated area

thoroughly with water. For waste disposal, see Section 13 of the SDS.

Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling Avoid contact with eyes and prolonged skin contact. Wash hands after handling. Observe

good industrial hygiene practices.

Conditions for safe storage,

including any incompatibilities Keep container tightly closed. Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Туре	Value	
Sodium azide (CAS 26628-22-8)	Ceiling	0.29 mg/m3	
		0.11 ppm	

US NIOSH Pocket Guide to Chemical Hazards: Ceiling Limit Value and Time Period (if specified)

Components	Type	Value	
Sodium azide (CAS 26628-22-8)	Ceiling	0.3 mg/m3	_
		0.1 ppm	

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering

Provide adequate ventilation. Provide easy access to water supply and eye wash facilities.

controls

Individual protection measures, such as personal protective equipment

Eye/face protection Skin protection

Risk of splashes: Wear safety glasses with side shields.

Hand protection

Wear protective gloves. Be aware that the liquid may penetrate the gloves. Frequent change

is advisable. Suitable gloves can be recommended by the glove supplier.

Other Wear appropriate clothing to prevent repeated or prolonged skin contact.

Respiratory protectionNo special precautions. Seek advice from local supervisor. **Thermal hazards**Wear appropriate thermal protective clothing, when necessary.

General hygieneConsiderations
Handle in accordance with good industrial hygiene and safety practice. Wash hands after handling. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.
Form Liquid.
Color Colorless.
Odor Odorless.
Odor threshold Not available.
PH Neutral.
Melting point/freezing point Not available.
Initial boiling point and Not available.

boiling range

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit Not available.

- lower (%)

Flammability limit Not available.

- upper (%)

Vapor pressureNot available.Vapor densityNot available.Relative densityNot available.Solubility(ies)Soluble in water.Partition coefficientNot available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

10. Stability and reactivity

ReactivityThe product is stable and non reactive under normal conditions of use, storage and

Chemical stability Stable at normal conditions.

Possibility of hazardous Sodium azide: Reacts with copper, lead, silver, mercury and carbon disulfide to form

reactions particularly shock-sensitive compounds. Reacts with acids, forming toxic and explosive

hydrogen azide.

Conditions to avoid None known.

Incompatible materials Heavy metals. Acids.

Hazardous decomposition

products

None known.

11. Toxicological information

Information on likely routes of exposure

Ingestion Large quantities: May cause discomfort if swallowed.

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation

hazard.

Dry skin.

Skin contact Prolonged contact may cause dryness of the skin. **Eye contact** Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects

Acute toxicity Large quantities: May cause discomfort if swallowed.

Skin corrosion/irritation May cause mild skin irritation.
Serious eye damage/eye May cause eye irritation.

irritation

Respiratory sensitizationBased on available data, the classification criteria are not met. **Skin sensitization**Based on available data, the classification criteria are not met.

Germ cell mutagenicity No data available.

Carcinogenicity

IARC Monographs. Overall Evaluation of CarcinogenicityNot listed.NTP Report on CarcinogensNot listed.OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)Not listed.

Reproductive toxicity No data available. Specific target organ toxicity No data available.

- single exposure

Specific target organ toxicity No data available.

- repeated exposure

Aspiration hazard Based on available data, the classification criteria are not met.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude

the possibility that large or frequent spills have a harmful or damaging effect on the

environment.

Persistence and degradability No data available.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Mobility in generalThe product is water soluble and may spread in water systems.Other adverse effectsThe environmental hazard of the product is considered to be limited.

13. Disposal considerations

Disposal instructions Dispose of in accordance with all applicable regulations. Do not discharge into drains, water

courses or onto the ground.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused Dispose of in accordance with local regulations.

products

Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in same manner as unused product.

14. Transport information

DOT Not regulated as dangerous goods.

IATA Not regulated as dangerous goods.

IMDG Not regulated as dangerous goods.

Transport in bulk according Not applicable.

to Annex II of MARPOL 73/78

and the IBC Code

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance No SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Safe Drinking Water Act (SDWA)

Food and Drug Administration (FDA)

Not regulated.

Not regulated.

Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer,

birth defects or other reproductive harm.

Massachusetts RTK - Substance ListNot listed.New Jersey Worker and Community Right-to-Know ActNot listed.Pennsylvania RTK - Hazardous SubstancesNot listed.Rhode Island RTKNot listed.California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT)Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	EC Inventory	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PIC	CS) Yes
United States & Puerto	Toxic Substances Control Act (TSCA) Inventory	Yes
Rico		

^{*}A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

 Issue date
 01/30/2016

 Revision date
 09/30/2016

 Version
 10

Further information Not available.

References Registry of Toxic Effects of Chemical Substances (RTECS)

HSDB® - Hazardous Substances Data Bank

Disclaimer This information is provided without warranty. The information is believed to be correct. This

information should be used to make an independent determination of the methods to

safeguard workers and the environment.



SAFETY DATA SHEET

1. Identification

Product identifier CircuLex S100A9/MRP14 ELISA Kit

10X Wash Buffer

Other means of identification

Product code CY-8062

Recommended use Research use only.

Recommended restrictions None known.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer andMedical & Biological Laboratories (MBL) Co., Ltd.Supplier (Asia)4-5-3 Sakae, Naka-ku, Nagoya, Aichi 460-0008, JapanTelephone number+81-52-238-1901 (Monday to Friday, 9 AM to 5 PM JST)

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URL http://www.mblintl.com/
Contact person Technical Service

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Not classified.
OSHA hazard(s) Not classified.

Label elements

Hazard symbol None.
Signal word None.
Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash thoroughly after handling.

Storage None.
Disposal None.
Hazard(s) not otherwise None.

classified (HNOC)

3. Composition/Information on ingredients

Mixtures

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

4. First-aid measures

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation

hazard.

Skin contact Remove contaminated clothing. Dry skin with paper towel or similar. Get medical attention if

irritation develops or persists.

Eye contact Rinse immediately with plenty of water, also under the eyelids. Get medical attention if

irritation develops or persists.

Ingestion No adverse effects due to ingestion are expected. Get medical attention if any discomfort

occurs.

Most important symptoms/ effects, acute and delayed

Dry skin.

Indication of immediate medical attention and special Treat symptomatically.

treatment needed **General information**

Get medical attention if any discomfort develops.

5. Fire-fighting measures

Suitable extinguishing media Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media

None known.

Specific hazards arising from None known.

the chemical

Special protective equipment Self-contained breathing apparatus and full protective clothing should be worn when fighting

and precautions for

chemical fires. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

firefighters Fire-fighting equipment/

instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards The product is non-combustible.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid prolonged and repeated contact. Wear suitable protective clothing. For personal

protection, see Section 8 of the SDS.

Methods and materials for containment and cleaning up

Absorb spillage with non-combustible, absorbent material. After removal, flush contaminated

area thoroughly with water. For waste disposal, see Section 13 of the SDS.

Prevent further leakage or spillage if safe to do so. **Environmental precautions**

7. Handling and storage

Precautions for safe handling Avoid prolonged and repeated contact. Wear appropriate personal protective equipment.

Observe good industrial hygiene practices.

Conditions for safe storage.

including any incompatibilities Keep container closed.

8. Exposure controls/personal protection

Occupational exposure limits No exposure limits noted for ingredient(s).

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering

controls

Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection

If risk of splashing, wear safety goggles or face shield.

Skin protection Hand protection

Wear protective gloves. Be aware that the liquid may penetrate the gloves. Frequent change

is advisable. Suitable gloves can be recommended by the glove supplier.

Wear protective gloves. Wear appropriate clothing to prevent repeated or prolonged skin Other

contact.

Respiratory protection

Thermal hazards

No protection is ordinarily required under normal conditions of use. Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and

protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid. **Form** Liquid. Colorless. Color Odor Odorless. **Odor threshold** Not available. Ηα Not available. Melting point/freezing point Not available. Initial boiling point and Not available.

boiling range

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit Not available.

i idililiability ii

ity iiiiit inot avallabl

- lower (%)

Flammability limit Not available.

- upper (%)

Vapor pressureNot available.Vapor densityNot available.Relative densityNot available.Solubility(ies)Soluble in water.Partition coefficientNot available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

10. Stability and reactivity

Reactivity The product is stable and non reactive under normal conditions of use, storage and

Chemical stability Stable at normal conditions.

Possibility of hazardous

reactions

None known.

Conditions to avoid None known.

Incompatible materials None known.

Hazardous decomposition No hazard in normal industrial use.

products

11. Toxicological information

Information on likely routes of exposure

Ingestion Large quantities: May cause discomfort if swallowed.

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation

hazard.

Skin contact Prolonged contact may cause dryness of the skin. **Eye contact** Direct contact with eyes may cause temporary irritation.

Symptoms related to the Dry skin.

physical, chemical and toxicological characteristics

Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

Serious eye damage/eye

Large quantities: May cause discomfort if swallowed.

Prolonged contact may cause dryness of the skin.

Direct contact with eyes may cause temporary irritation.

irritation

Respiratory sensitizationNo data available.Skin sensitizationNot a skin sensitizer.Germ cell mutagenicityNo data available.CarcinogenicityNo data available.Reproductive toxicityNo data available.

Specific target organ toxicity No data available.

- single exposure

Specific target organ toxicity No data available.

- repeated exposure

Aspiration hazard No data available.

12. Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this

does not exclude the possibility that large or frequent spills have a harmful or damaging

effect on the environment.

Persistence and degradability No data available. Bioaccumulative potential No data available. Mobility in soil No data available.

Mobility in general The product is water soluble and may spread in water systems.

No data available. Other adverse effects

13. Disposal considerations

Disposal instructions Dispose of in accordance with all applicable regulations. Do not discharge into drains, water

courses or onto the ground.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused Dispose of in accordance with local regulations.

products

Contaminated packaging Dispose of in same manner as unused product.

Not applicable.

14. Transport information

DOT Not regulated as dangerous goods. **IATA** Not regulated as dangerous goods. **IMDG** Not regulated as dangerous goods.

Transport in bulk according

to Annex II of MARPOL 73/78

and the IBC Code

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed. CERCLA Hazardous Substance List (40 CFR 302.4) Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance No SARA 311/312 Hazardous chemical No

Not regulated. SARA 313 (TRI reporting)

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated. Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Safe Drinking Water Act (SDWA) Not regulated. Not listed. Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR

1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 Not regulated.

CFR 1310.12(c))

DEA Exempt Chemical Mixtures Code NumberNot regulated.Food and Drug Administration (FDA)Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer,

birth defects or other reproductive harm.

Massachusetts RTK - Substance ListNot regulated.New Jersey Worker and Community Right-to-Know ActNot regulated.Pennsylvania RTK - Hazardous SubstancesNot regulated.Rhode Island RTKNot regulated.California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT)Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	EC Inventory	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PIC	CCS) Yes
United States & Puerto	Toxic Substances Control Act (TSCA) Inventory	Yes
Rico		

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

 Issue date
 01/30/2016

 Revision date
 09/30/2016

Version 10

Further information Not available.

Disclaimer This information is provided without warranty. The information is believed to be correct. This

information should be used to make an independent determination of the methods to

safeguard workers and the environment.



SAFETY DATA SHEET

1. Identification

Product identifier CircuLex S100A9/MRP14 ELISA Kit

Human S100A9 Standard

Other means of identification

Product code CY-8062

Recommended use Research use only.

Recommended restrictions None known.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer andMedical & Biological Laboratories (MBL) Co., Ltd.Supplier (Asia)4-5-3 Sakae, Naka-ku, Nagoya, Aichi 460-0008, JapanTelephone number+81-52-238-1901 (Monday to Friday, 9 AM to 5 PM JST)

 Fax
 +81-52-238-1440

 E-mail
 sds-support@mbl.co.jp

URL http://www.mbl.co.jp/e/index.html

Contact person SDS Support

Supplier MBL International Corporation

15A Constitution Way, Woburn, MA 01801, USA

Telephone number +1-800-200-5459, option 3

Fax +1-781-939-6963
E-mail tech@mblintl.com
URL http://www.mblintl.com/
Contact person Technical Service

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Not classified.
OSHA hazard(s) Not classified.

Label elements

Hazard symbol None.
Signal word None.
Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash thoroughly after handling.

Storage None.
Disposal None.
Hazard(s) not otherwise None.

classified (HNOC)

3. Composition/Information on ingredients

Mixtures

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

4. First-aid measures

Inhalation Move injured person into fresh air and keep person calm under observation. Get medical

attention if any discomfort continues.

Skin contact Wash contact areas with soap and water. Get medical attention if irritation develops or

persists.

Eye contact Do not rub eye. Rinse the eye with water immediately. Make sure to remove any contact

lenses from the eyes before rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth thoroughly if dust is ingested. Get medical attention if any discomfort continues.

Revised: 09/30/2016, 18/37

Most important symptoms/

effects, acute and delayed

Indication of immediate medical attention and special

treatment needed **General information** Dry skin.

Treat symptomatically.

Get medical attention if any discomfort develops.

Use fire-extinguishing media appropriate for surrounding materials.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

None known.

Specific hazards arising from None known.

the chemical

and precautions for

firefighters

Special protective equipment Self-contained breathing apparatus and full protective clothing should be worn when fighting chemical fires. Selection of respiratory protection for firefighting: follow the general fire

precautions indicated in the workplace.

Fire-fighting equipment/

instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid prolonged and repeated contact. Wear suitable protective clothing. For personal protection, see Section 8 of the SDS.

Methods and materials for containment and cleaning up Sweep up or vacuum up spillage and collect in suitable container for disposal. After removal, flush contaminated area thoroughly with water. Never return spills to original containers for

Environmental precautions Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling

Avoid prolonged and repeated contact. Wear appropriate personal protective equipment.

Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Keep container closed.

8. Exposure controls/personal protection

Occupational exposure limits No exposure limits noted for ingredient(s).

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering

Provide adequate ventilation. Minimize dust generation and accumulation. Provide easy

controls

access to water supply and eye wash facilities.

Individual protection measures, such as personal protective equipment

Eye/face protection

If risk of splashing, wear safety goggles or face shield.

Skin protection Hand protection

Wear protective gloves. Frequent change is advisable. Suitable gloves can be recommended

by the glove supplier.

Other

Wear protective gloves. Wear appropriate clothing to prevent repeated or prolonged skin

contact.

Respiratory protection Thermal hazards

No protection is ordinarily required under normal conditions of use. Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and

protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Solid. Physical state Powder. **Form**

Color White. Odor Odorless. **Odor threshold** Not available. рΗ Not available. Melting point/freezing point Not available. Not available. Initial boiling point and

boiling range

Flash point Not available. Not available. **Evaporation rate** Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits Not available. Flammability limit

- lower (%)

Flammability limit Not available.

- upper (%)

Not available. Vapor pressure Not available. Vapor density Not available. Relative density Solubility(ies) Soluble in water. **Partition coefficient** Not available.

(n-octanol/water)

Auto-ignition temperature Not available. Not available. **Decomposition temperature** Not available. **Viscosity**

10. Stability and reactivity

Reactivity The product is stable and non reactive under normal conditions of use, storage and

Chemical stability Stable at normal conditions.

Possibility of hazardous

reactions

None known.

Conditions to avoid None known. None known. Incompatible materials

No hazard in normal industrial use. **Hazardous decomposition**

products

11. Toxicological information

Information on likely routes of exposure

Ingestion Large quantities: May cause discomfort if swallowed.

Inhalation Dust may irritate respiratory system.

Skin contact Prolonged contact may cause dryness of the skin. Direct contact with eyes may cause temporary irritation. Eye contact

Dry skin. Symptoms related to the

physical, chemical and toxicological characteristics

Information on toxicological effects

Large quantities: May cause discomfort if swallowed. **Acute toxicity** Prolonged contact may cause dryness of the skin. Skin corrosion/irritation Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

No data available. Respiratory sensitization Skin sensitization Not a skin sensitizer. Germ cell mutagenicity No data available. No data available. Carcinogenicity No data available. Reproductive toxicity No data available. Specific target organ toxicity

- single exposure

Specific target organ toxicity No data available.

- repeated exposure

Aspiration hazard No data available.

12. Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this

does not exclude the possibility that large or frequent spills have a harmful or damaging

effect on the environment.

Persistence and degradability No data available.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Mobility in general The product is water soluble and may spread in water systems.

Other adverse effects No data available.

13. Disposal considerations

Disposal instructions Dispose of in accordance with all applicable regulations. Do not discharge into drains, water

courses or onto the ground.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused Dispose of in accordance with local regulations.

products

Contaminated packaging Dispose of in same manner as unused product.

14. Transport information

DOT Not regulated as dangerous goods.

IATA Not regulated as dangerous goods.

IMDG Not regulated as dangerous goods.

Transport in bulk according Not applicable.

to Annex II of MARPOL 73/78

and the IBC Code

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

Not regulated.

Not regulated.

Not listed.

SARA 302 Extremely hazardous substance No SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting) Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Safe Drinking Water Act (SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR

1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 Not regulated.

CFR 1310.12(c))

DEA Exempt Chemical Mixtures Code Number

Food and Drug Administration (FDA)

Not regulated.

Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer,

birth defects or other reproductive harm.

Massachusetts RTK - Substance ListNot regulated.New Jersey Worker and Community Right-to-Know ActNot regulated.Pennsylvania RTK - Hazardous SubstancesNot regulated.Rhode Island RTKNot regulated.California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT)Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	EC Inventory	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PIC	CS) Yes
United States & Puerto	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

 Issue date
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 Revision date
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Version 10

Further information Not available.

Disclaimer This information is provided without warranty. The information is believed to be correct. This

information should be used to make an independent determination of the methods to

safeguard workers and the environment.



SAFETY DATA SHEET

1. Identification

Product identifier CircuLex S100A9/MRP14 ELISA Kit

Microplate

Other means of identification

Product code CY-8062

Recommended use Research use only.

Recommended restrictions None known.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer andMedical & Biological Laboratories (MBL) Co., Ltd.Supplier (Asia)4-5-3 Sakae, Naka-ku, Nagoya, Aichi 460-0008, JapanTelephone number+81-52-238-1901 (Monday to Friday, 9 AM to 5 PM JST)

Fax +81-52-238-1440 **E-mail** sds-support@mbl.co.jp

URL http://www.mbl.co.jp/e/index.html

Contact person SDS Support

Supplier MBL International Corporation

15A Constitution Way, Woburn, MA 01801, USA

Telephone number +1-800-200-5459, option 3

Fax +1-781-939-6963
E-mail tech@mblintl.com
URL http://www.mblintl.com/
Contact person Technical Service

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Not classified.
OSHA hazard(s) Not classified.

Label elements

Hazard symbolNone.Signal wordNone.Hazard statementNone.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash thoroughly after handling.

Storage None.

Disposal None.

Hazard(s) not otherwise None.

classified (HNOC)

3. Composition/Information on ingredients

Mixtures

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

4. First-aid measures

Inhalation Move injured person into fresh air and keep person calm under observation. Get medical

attention if any discomfort continues.

Skin contact Wash contact areas with soap and water. Get medical attention if irritation develops or

persists.

Eye contact Do not rub eye. Rinse the eye with water immediately. Make sure to remove any contact

lenses from the eyes before rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth thoroughly if dust is ingested. Get medical attention if any discomfort continues.

Revised: 09/30/2016, 23/37

Most important symptoms/

effects, acute and delayed

Indication of immediate medical attention and special Treat symptomatically.

treatment needed

General information Get medical attention if any discomfort develops.

Dry skin.

5. Fire-fighting measures

Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media

None known.

Specific hazards arising from None known.

the chemical

and precautions for

firefighters

Special protective equipment Self-contained breathing apparatus and full protective clothing should be worn when fighting chemical fires. Selection of respiratory protection for firefighting: follow the general fire

precautions indicated in the workplace.

Fire-fighting equipment/

instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid prolonged and repeated contact. Wear suitable protective clothing. For personal protection, see Section 8 of the SDS.

Methods and materials for containment and cleaning up Sweep up or vacuum up spillage and collect in suitable container for disposal. After removal, flush contaminated area thoroughly with water. Never return spills to original containers for

Environmental precautions Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling Avoid prolonged and repeated contact. Wear appropriate personal protective equipment.

Observe good industrial hygiene practices.

Conditions for safe storage,

including any incompatibilities Keep container closed.

8. Exposure controls/personal protection

Occupational exposure limits No exposure limits noted for ingredient(s).

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering

controls

Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection

If risk of splashing, wear safety goggles or face shield.

Skin protection

Wear protective gloves. Frequent change is advisable. Suitable gloves can be recommended Hand protection

by the glove supplier.

Other Wear protective gloves. Wear appropriate clothing to prevent repeated or prolonged skin

contact.

Respiratory protection Thermal hazards

No protection is ordinarily required under normal conditions of use. Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and

protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Solid. Physical state Solid. **Form**

ColorColorless.OdorOdorless.Odor thresholdNot available.pHNot available.Melting point/freezing pointNot available.Initial boiling point andNot available.

boiling range

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit

Not available.

- lower (%)

Flammability limit Not available.

- upper (%)

Vapor pressureNot available.Vapor densityNot available.Relative densityNot available.Solubility(ies)Not available.Partition coefficientNot available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

10. Stability and reactivity

Reactivity The product is stable and non reactive under normal conditions of use, storage and

Chemical stability Stable at normal conditions.

Possibility of hazardous

reactions

None known.

Conditions to avoid None known. Incompatible materials None known.

Hazardous decomposition No hazard in normal industrial use.

products

11. Toxicological information

Information on likely routes of exposure

Ingestion Large quantities: May cause discomfort if swallowed.

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation

hazard.

Skin contactProlonged contact may cause dryness of the skin.Eye contactDirect contact with eyes may cause temporary irritation.

Symptoms related to the Dry skin.

physical, chemical and toxicological characteristics

Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

Serious eye damage/eye

Large quantities: May cause discomfort if swallowed.

Prolonged contact may cause dryness of the skin.

Direct contact with eyes may cause temporary irritation.

irritation

Respiratory sensitization
Skin sensitization
Skin sensitization
Not a skin sensitizer.
Germ cell mutagenicity
No data available.
Carcinogenicity
No data available.
No data available.
Specific target organ toxicity
No data available.

- single exposure

Specific target organ toxicity No data available.

- repeated exposure

No data available. **Aspiration hazard**

12. Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this

does not exclude the possibility that large or frequent spills have a harmful or damaging

effect on the environment.

Persistence and degradability No data available. Bioaccumulative potential No data available. Mobility in soil No data available.

Mobility in general The product is water soluble and may spread in water systems.

Other adverse effects No data available.

13. Disposal considerations

Disposal instructions Dispose of in accordance with all applicable regulations. Do not discharge into drains, water

courses or onto the ground.

Dispose of in accordance with local regulations. Local disposal regulations

Not regulated. Hazardous waste code

Waste from residues / unused Dispose of in accordance with local regulations.

products

Contaminated packaging Dispose of in same manner as unused product.

14. Transport information

DOT Not regulated as dangerous goods. **IATA** Not regulated as dangerous goods. **IMDG** Not regulated as dangerous goods.

Transport in bulk according Not applicable.

to Annex II of MARPOL 73/78

and the IBC Code

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed. CERCLA Hazardous Substance List (40 CFR 302.4) Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

> Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

Not regulated.

Not regulated.

Not regulated.

Not regulated.

Not listed.

SARA 302 Extremely hazardous substance Nο SARA 311/312 Hazardous chemical Nο

SARA 313 (TRI reporting) Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Safe Drinking Water Act (SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR

1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21

CFR 1310.12(c))

DEA Exempt Chemical Mixtures Code Number Not regulated.

Not regulated. Food and Drug Administration (FDA)

US state regulations This product does not contain a chemical known to the State of California to cause cancer,

birth defects or other reproductive harm.

Massachusetts RTK - Substance ListNot regulated.New Jersey Worker and Community Right-to-Know ActNot regulated.Pennsylvania RTK - Hazardous SubstancesNot regulated.Rhode Island RTKNot regulated.California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT)Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	EC Inventory	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PIC	CS) Yes
United States & Puerto	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

 Issue date
 01/30/2016

 Revision date
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Version 10

Further information Not available.

Disclaimer This information is provided without warranty. The information is believed to be correct. This

information should be used to make an independent determination of the methods to

safeguard workers and the environment.



SAFETY DATA SHEET

1. Identification

Product identifier CircuLex S100A9/MRP14 ELISA Kit

20x HRP conjugated Detection Antibody, Conjugate Dilution Buffer

Other means of identification

Product code CY-8062

Recommended use Research use only.

Recommended restrictions None known.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer andMedical & Biological Laboratories (MBL) Co., Ltd.Supplier (Asia)4-5-3 Sakae, Naka-ku, Nagoya, Aichi 460-0008, JapanTelephone number+81-52-238-1901 (Monday to Friday, 9 AM to 5 PM JST)

Fax +81-52-238-1440 **E-mail** sds-support@mbl.co.jp

URL http://www.mbl.co.jp/e/index.html

Contact person SDS Support

Supplier MBL International Corporation

15A Constitution Way, Woburn, MA 01801, USA

Telephone number +1-800-200-5459, option 3

Fax +1-781-939-6963
E-mail tech@mblintl.com
URL http://www.mblintl.com/
Contact person Technical Service

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Not classified.
OSHA hazard(s) Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage None.
Disposal None.
Hazard(s) not otherwise None.

classified (HNOC)

3. Composition/Information on ingredients

Mixtures

Chemical name	CAS number	%
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one	55965-84-9	< 0.1
and 2-methyl-4-isothiazolin-3-one		

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations

are in percent by volume.

4. First-aid measures

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation

hazard.

Revised: 09/30/2016, 28/37

Skin contact Remove contaminated clothing. Dry skin with paper towel or similar. Get medical attention if

irritation develops or persists.

Eye contact Rinse immediately with plenty of water, also under the eyelids. Get medical attention if

irritation develops or persists.

Ingestion Drink plenty of water. Get medical attention if any discomfort occurs.

Most important symptoms/ effects, acute and delayed

Dry skin.

Indication of immediate

medical attention and special

treatment needed

Treat symptomatically.

General information Get medical attention if any discomfort develops.

5. Fire-fighting measures

Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

None known.

media

Specific hazards arising from None known.

the chemical

instructions

and precautions for

Special protective equipment Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire.

firefighters Fire-fighting equipment/

Move containers from fire area if you can do that without risk. Use water spray to cool

unopened containers. Prevent entry to sewers and public waters.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes and prolonged skin contact. For personal protection, see Section 8

of the SDS.

Methods and materials for containment and cleaning up **Environmental precautions**

Absorb spillage with suitable absorbent material. Flush contaminated area thoroughly with water, following removal of the spillage. For waste disposal, see Section 13 of the SDS.

Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling Avoid contact with eyes and prolonged skin contact. Wash hands after handling. Observe

good industrial hygiene practices.

Conditions for safe storage,

including any incompatibilities Keep container tightly closed.

8. Exposure controls/personal protection

Occupational exposure limits No exposure limits noted for ingredient(s).

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering

Ensure adequate ventilation is available, especially in confined areas.

controls

Individual protection measures, such as personal protective equipment

Eye/face protection

Risk of splashes: Wear safety glasses with side shields.

Skin protection

Hand protection Risk of contact: Wear protective gloves. Suitable gloves can be recommended by the glove

supplier.

Other Wear appropriate clothing to prevent repeated or prolonged skin contact.

Respiratory protection Where excessive vapor, mist or dust may result, use NIOSH approved respiratory protection

equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands after handling. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid. Liquid. **Form** Color Colorless. Odorless. Odor **Odor threshold** Not available. Neutral. На Melting point/freezing point Not available. Initial boiling point and Not available.

boiling range

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit Not available.

- lower (%)

Flammability limit Not available.

- upper (%)

Vapor pressureNot available.Vapor densityNot available.Relative densityNot available.Solubility(ies)Soluble in water.Partition coefficientNot available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

10. Stability and reactivity

Reactivity The product is non-reactive under normal conditions of use, storage and transport.

Chemical stability Stable at normal conditions.

Possibility of hazardous

reactions

 $\label{thm:local_equation} \mbox{Hazardous polymerization does not occur. Hazardous reactions do not occur.}$

Conditions to avoid None known.

Incompatible materials None known.

Hazardous decomposition None known.

products

11. Toxicological information

Information on likely routes of exposure

Ingestion Large quantities: May cause discomfort if swallowed.

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation

hazard.

Skin contactProlonged contact may cause dryness of the skin. **Eye contact**Direct contact with eyes may cause temporary irritation.

Symptoms related to the Dry skin.

physical, chemical and toxicological characteristics

Information on toxicological effects

Acute toxicity Large quantities: May cause discomfort if swallowed.

Skin corrosion/irritationMay cause mild skin irritation.Serious eye damage/eyeMay cause eye irritation.Respiratory sensitizationNo data available.Skin sensitizationNo data available.Germ cell mutagenicityNo data available.CarcinogenicityNo data available.

Reproductive toxicity No data available.

Specific target organ toxicity No data available.

- single exposure

Specific target organ toxicity No data available.

- repeated exposure

Aspiration hazard No data available.

12. Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this

does not exclude the possibility that large or frequent spills have a harmful or damaging

effect on the environment.

Persistence and degradability No data available. **Bioaccumulative potential** No data available.

Mobility in soil Expected to be highly mobile in soil.

Mobility in general The product is water soluble and may spread in water systems.

Other adverse effects No data available.

13. Disposal considerations

Disposal instructions Dispose of in accordance with all applicable regulations. Do not discharge into drains, water

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused Dispose of in accordance with local regulations.

products

Contaminated packaging Dispose of in same manner as unused product.

14. Transport information

DOT Not regulated as dangerous goods. IATA Not regulated as dangerous goods. **IMDG** Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 Not applicable.

and the IBC Code

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. Not listed. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) **CERCLA Hazardous Substance List (40 CFR 302.4)** Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - No **Hazard categories**

> Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance No SARA 311/312 Hazardous chemical Nο

SARA 313 (TRI reporting) Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated. Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated. Safe Drinking Water Act (SDWA) Not regulated. Not regulated. Food and Drug Administration (FDA)

US state regulations This product does not contain a chemical known to the State of California to cause cancer,

birth defects or other reproductive harm.

Massachusetts RTK - Substance List Not regulated. New Jersey Worker and Community Right-to-Know Act Not regulated. Pennsylvania RTK - Hazardous SubstancesNot regulated.Rhode Island RTKNot regulated.California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT)Not listed.

International inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	EC Inventory	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PIC	CS) Yes
United States & Puerto	Toxic Substances Control Act (TSCA) Inventory	No

^{*}A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

 Issue date
 01/30/2016

 Revision date
 09/30/2016

Version 10

Further information Not available.

References HSDB® - Hazardous Substances Data Bank

Registry of Toxic Effects of Chemical Substances (RTECS)

C&L Inventory database

Disclaimer This information is provided without warranty. The information is believed to be correct. This

information should be used to make an independent determination of the methods to

safeguard workers and the environment.



SAFETY DATA SHEET

1. Identification

Product identifier CircuLex S100A9/MRP14 ELISA Kit

Substrate Reagent

Other means of identification

Product code CY-8062

Recommended use Research use only.

Recommended restrictions None known.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer andMedical & Biological Laboratories (MBL) Co., Ltd.Supplier (Asia)4-5-3 Sakae, Naka-ku, Nagoya, Aichi 460-0008, JapanTelephone number+81-52-238-1901 (Monday to Friday, 9 AM to 5 PM JST)

Fax +81-52-238-1440 **E-mail** sds-support@mbl.co.jp

URL http://www.mbl.co.jp/e/index.html

Contact person SDS Support

Supplier MBL International Corporation

15A Constitution Way, Woburn, MA 01801, USA

Telephone number +1-800-200-5459, option 3

Fax +1-781-939-6963

E-mail tech@mblintl.com

URL http://www.mblintl.com/

Contact person Technical Service

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Not classified.
OSHA hazard(s) Not classified.

Label elements

Hazard symbol None.
Signal word None.
Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

None.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

3. Composition/Information on ingredients

Mixtures

Chemical name	CAS number	%
Hydrogen peroxide	7722-84-1	< 0.1
3,3',5,5'-Tetramethylbenzidine	54827-17-7	≤ 0.05

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations

are in percent by volume.

4. First-aid measures

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation

hazard.

Skin contact Remove contaminated clothing. Dry skin with paper towel or similar. Get medical attention if

irritation develops or persists.

Eye contact Rinse immediately with plenty of water, also under the eyelids. Get medical attention if

irritation develops or persists.

Ingestion Drink plenty of water. Get medical attention if any discomfort occurs.

Most important symptoms/ effects, acute and delayed

May cause temporary irritation on skin or eye contact.

Indication of immediate medical attention and special

treatment needed

Treat symptomatically.

General information

Get medical attention if any discomfort develops.

5. Fire-fighting measures

Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

None known.

media

Specific hazards arising from None known.

the chemical

instructions

and precautions for

firefighters Fire-fighting equipment/

Special protective equipment Self-contained breathing apparatus and full protective clothing should be worn when fighting chemical fires. Selection of respiratory protection for firefighting: follow the general fire

precautions indicated in the workplace.

Move containers from fire area if you can do that without risk. Use water spray to cool

unopened containers. Prevent entry to sewers and pubic waters.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid prolonged and repeated contact. Wear suitable protective clothing. For personal

protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Absorb spillage with suitable absorbent material. After removal, flush contaminated area

thoroughly with water.

Environmental precautions Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling Avoid contact with eyes and prolonged skin contact. Wear appropriate personal protective

equipment (See Section 8). Wash hands after handling. Observe good industrial hygiene

practices.

Conditions for safe storage,

including any incompatibilities Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	PEL	1.4 mg/m3
		1 ppm
US. ACGIH Threshold Limit Values		
Components	Type	Value
Compension		

CO INCOMP CONOC CONOC CO	0	expectate mint (tt==)
0	T	Malara

Components	Туре	Value	
Hydrogen peroxide (CAS 7722-84-1)	TWA	1.4 mg/m3	
		1 ppm	

No biological exposure limits noted for the ingredient(s). **Biological limit values**

Exposure guidelines No exposure standards allocated. Appropriate engineering

controls

Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Risk of splashes: Wear safety glasses with side shields. Eye/face protection

Skin protection

Wear protective gloves. Be aware that the liquid may penetrate the gloves. Frequent change Hand protection

is advisable. Suitable gloves can be recommended by the glove supplier.

Wear appropriate clothing to prevent repeated or prolonged skin contact. Other

No special precautions. Seek advice from local supervisor. Respiratory protection Wear appropriate thermal protective clothing, when necessary. Thermal hazards

Always observe good personal hygiene measures, such as washing after handling the **General hygiene** considerations material and before eating, drinking, and/or smoking. Routinely wash work clothing and

protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liauid. Liquid. **Form** Color Pale amber. Odor Odorless. Not available. **Odor threshold** Not available. Melting point/freezing point Not available. Initial boiling point and Not available.

boiling range

Not applicable. Flash point **Evaporation rate** Not available. Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits Flammability limit Not applicable.

- lower (%)

Flammability limit Not applicable.

- upper (%)

Not available. Vapor pressure Vapor density Not available. Not available. Relative density Soluble in water. Solubility(ies) **Partition coefficient** Not available.

(n-octanol/water)

Auto-ignition temperature Not available. **Decomposition temperature** Not available. Not available. **Viscosity**

10. Stability and reactivity

Reactivity The product is non-reactive under normal conditions of use, storage and transport.

Stable under the prescribed storage conditions. **Chemical stability**

Possibility of hazardous

reactions

None known.

Conditions to avoid Contact with incompatible materials. Elevated temperatures.

Incompatible materials Strong oxidizing agents.

No hazardous decomposition products are known. Hazardous decomposition

products

11. Toxicological information

Information on likely routes of exposure

May cause discomfort if swallowed. Ingestion

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation

hazard

Skin contact Prolonged contact may cause dryness of the skin.

Eye contact May cause eye irritation on direct contact.

Symptoms related to the physical, chemical and toxicological characteristics May cause temporary irritation on skin or eye contact.

Information on toxicological effects

May cause discomfort if swallowed. **Acute toxicity**

Components		Species	Test Results	
Hydrogen peroxid	le (CAS 7722-84-1)			
Acute				
Oral	LD50	Rat	311 mg/kg	
Dermal	LD50	Rat	4,060 mg/kg	

Skin corrosion/irritation

Prolonged contact may cause dryness of the skin.

Serious eye damage/eye

May cause eye irritation on direct contact.

irritation

No data available. Respiratory sensitization No data available. Skin sensitization Germ cell mutagenicity No data available. No data available. Carcinogenicity Reproductive toxicity No data available. Specific target organ toxicity No data available.

- single exposure

Specific target organ toxicity No data available.

- repeated exposure

Aspiration hazard No data available.

12. Ecological information

Ecotoxicity

Components		Species	Test Results	
Hydrogen peroxic	de (CAS 7722-84-1)			
Aquatic				
Algae	EC50	Nitzschia	0.85 mg/L, 72 hours	

Persistence and degradability The product is biodegradable. Bioaccumulative potential The product is not bioaccumulating. Mobility in soil Expected to be highly mobile in soil.

The product is water soluble and may spread in water systems. Mobility in general Other adverse effects The environmental hazard of the product is considered to be limited.

13. Disposal considerations

Dispose of in accordance with all applicable regulations. Do not discharge into drains, water **Disposal instructions**

courses or onto the ground.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in same manner as unused product.

14. Transport information

DOT Not regulated as dangerous goods. **IATA** Not regulated as dangerous goods. **IMDG** Not regulated as dangerous goods. Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78

and the IBC Code

products

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance No SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Safe Drinking Water Act (SDWA)

Not regulated.

Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer,

birth defects or other reproductive harm.

Massachusetts RTK - Substance ListNot regulated.New Jersey Worker and Community Right-to-Know ActNot regulated.Pennsylvania RTK - Hazardous SubstancesNot regulated.Rhode Island RTKNot regulated.California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT)Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	EC Inventory	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PIC	CS) No
United States & Puerto	Toxic Substances Control Act (TSCA) Inventory	Yes
Rico		

^{*}A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

 Issue date
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List of abbreviations EC50: Effective Concentration, 50%.

LD50: Lethal Dose, 50%.

Further information Not available.

References HSDB® - Hazardous Substances Data Bank

Registry of Toxic Effects of Chemical Substances (RTECS) IARC Monographs. Overall Evaluation of Carcinogenicity

Revised: 09/30/2016, 37/37

Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.