

## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

CTL-TEST™  
CTL-TEST™ PLUS  
CTL-TEST™ B

### Section 1: IDENTIFICATION

- Product name:** CTL-Test™, CTL-Test™ PLUS, CTL-Test™ B (ImmunoSpot® Kit)
- Catalog number:** CTLT-010, CTLT-005, CTLTP-010, CTLTP-005, CTLTB-010, CTLTB-005; serum-free cell culture medium included in all ImmunoSpot® Kits.
- Company name:** Cellular Technology Limited  
20521 Chagrin Boulevard  
Shaker Heights, OH 44122-5350 USA  
+1 216-791-5084 T • +1 216-751-1373 F  
+1 888-791-4005 Toll Free US  
kits@immunospot.com  
www.immunospot.com
- Recommended usage:** CTL-Test™ Medium provides a nutritionally complete and balanced environment for cells used in ELISPOT assays.  
For laboratory research use only. Not for use in diagnostic or therapeutic procedures.
- Emergency telephone:** +1 216-791-5084; +1 888-791-4005 Toll Free US

### Section 2: HAZARD(S) IDENTIFICATION

- Classification:** Buffered, serum-free solution containing a proprietary blend of injection-grade water supplemented with amino acids, vitamins, inorganic salts, and HSA; none of which are considered hazardous at the concentration level used.
- GHS signal word:** Not a hazardous mixture
- Hazard statements:** Not a hazardous mixture
- Precautionary statements:** Not a hazardous mixture
- Response statements:** Not a hazardous mixture
- Risk phrases:** Not a hazardous mixture
- Safety phrases:** S36/S37 – Wear suitable protective clothing and gloves.

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

CONTAINS	CAS NUMBER	EC NUMBER	CONTENT
HSA	70024-90-7	274-272-6	N/A

### Section 4: FIRST-AID MEASURES

**Description of first aid measures:**

- Skin and eyes:** In case of contact with eyes, wash or flush eyes as a precaution.
- Inhalation:** No treatment as this product is not likely to be inhaled.
- Ingestion:** If ingested do not induce vomiting; rinse mouth with water.

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### Section 5: FIRE-FIGHTING MEASURES

- Suitable extinguishing media:** Carbon dioxide extinguishing powder, dry chemicals, or water spray can be used for small fires. Fight larger fires with water spray or alcohol-resistant foam.
- Special hazards arising from the substance or mixture:** No further relevant information available
- Advice for firefighters:** Wear self-contained breathing apparatus if necessary


### Section 6: ACCIDENTAL RELEASE MEASURES

- Personal precautions:** Use proper personal protective equipment
- Environmental precautions:** No precautions required
- Containment/clean-up measures:** For spills and leaks, ventilate area of leak or spill. Absorb spill using an absorbent, noncombustible material and dispose of collected material according to local and regional regulations.

### Section 7: HANDLING AND STORAGE

- Precautions for safe handling:** Use only with adequate ventilation.  
Wear chemical-resistant gloves.
- Conditions for safe storage:** Store refrigerated at 4°C, protect from light
- Incompatible materials:** Strong acids, strong oxidizing agents, and strong reducers.

### Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

- PEL:** This product does not contain any ingredients listed on OSHA PEL Threshold Limit Values.
- Personal protective equipment:** Wear chemical-resistant gloves 
- General protective hygiene considerations:** Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly with soap and water after handling and before eating or drinking. Safety shower and eye wash should be available and close to work areas.
- Environmental exposure controls:** Follow best practice for site management and disposal of waste.

### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear orange-red liquid	<b>Vapor pressure</b>	Not available
<b>Odor</b>	Odorless	<b>Vapor density</b>	Not available
<b>Odor threshold</b>	Not available	<b>Relative density</b>	Not available
<b>pH</b>	Not available	<b>Solubility</b>	Complete
<b>Melting point</b>	Not available	<b>Partition coefficient</b>	Not available
<b>Freezing point</b>	Not available	<b>Auto-ignition temperature</b>	Not available
<b>Initial boiling point and range</b>	Not available	<b>Decomposition temperature</b>	Not available
<b>Flash point</b>	Not available	<b>Evaporation rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not available	<b>Viscosity</b>	Not available
<b>Upper/lower flammability or explosive limits</b>	Not available		

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### Section 10: STABILITY AND REACTIVITY

- Reactivity:** No data available
- Chemical stability:** Stable under recommended storage conditions.
- Possibility of hazardous reactions:** No data available
- Conditions to avoid:** No data available
- Incompatible materials:** Strong acids, strong oxidizing agents, and strong reducers.
- Hazardous decomposition products:** None

### Section 11: TOXICOLOGICAL INFORMATION

- Routes of entry/exposure:** Skin, eyes, ingestion
- Reproductive toxicity:** No data available
- Acute toxicity:** No data available
- Acute effects on skin:** Not a skin irritant
- Chronic effects on skin:** No data available
- Acute effects on eyes:** Not an eye irritant
- Chronic effects on eyes:** No data available
- Carcinogenicity:** No data available
- Germ cell mutagenicity:** No data available
- Symptoms of chemical exposure:** None known

### Section 12: ECOLOGICAL INFORMATION

- Toxicity:** No data available
- Persistence and biodegradability:** No data available
- Bioaccumulative potential:** No data available
- Mobility in soil:** No data available
- Other adverse effects:** No data available on the adverse effects of this material on the environment.

### Section 13: DISPOSAL CONSIDERATIONS

- Product waste treatment:** Dispose of product waste in accordance with applicable national, regional, or local regulations.
- Packaging waste treatment:** Dispose of packaging waste in accordance with applicable national, regional, or local regulations.
- Precautions:** No data available

## SAFETY DATA SHEET (SDS)

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CTL-TEST™ B

### Section 14: TRANSPORT INFORMATION

**DOT number:** Not a dangerous good  
**UN number:** Not a dangerous good  
**IMDG code:** Not a marine pollutant  
**IATA code:** Not a dangerous good

### Section 15: REGULATORY INFORMATION

**U.S. federal and state regulations:**

**TSCA:** CAS# 70024-90-7

**California proposition 65:** Not listed as one of California's known or potential carcinogens.

**CERCLA/SARA:** Not listed

**EU labeling:** EC #247-272-6

### Section 16: OTHER INFORMATION

The information and recommendations in this Safety Data Sheet are believed to be accurate as of the date of issue. Nothing herein shall be deemed to create a warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this data to formulate the necessary safety precautions, as well as to decide the suitability of the material or product for any particular purpose. This product is intended for use only by persons having necessary technical skills and facilities for its proper handling. Since the conditions and manner are outside of the control of Cellular Technology Limited (CTL), CTL shall not be held liable for any damage or injury resulting from the use, misuse, or mishandling of the above product, or the information contained in this Safety Data Sheet.

Issued 12-01-15

## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

COATING ANTIBODY

### Section 1: IDENTIFICATION

- Product name:** Coating Antibody (ImmunoSpot® Kit)
- Product Description:** A component of all human ImmunoSpot® Kits.
- Company name:** Cellular Technology Limited  
20521 Chagrin Boulevard  
Shaker Heights, OH 44122-5350 USA  
+1 216-791-5084 T • +1 216-751-1373 F  
+1 888-791-4005 Toll Free US  
kits@immunospot.com  
www.immunospot.com
- Recommended usage:** The **Coating Antibody** is used to capture cellular secretions from a PVDF membrane in ELISPOT assays.  
For laboratory research use only. Not for use in diagnostic or therapeutic procedures.
- Emergency telephone:** +1 216-791-5084; +1 888-791-4005 Toll Free US

### Section 2: HAZARD(S) IDENTIFICATION

- Classification:** Solution containing 0.02% thimerosal, not considered hazardous at the concentration level used.
- GHS signal word:** Not a hazardous mixture
- Hazard statements:** Not a hazardous mixture
- Precautionary statements:** Not a hazardous mixture
- Response statements:** Not a hazardous mixture
- Risk phrases:** Not a hazardous mixture
- Safety phrases:** S36/S37 – Wear suitable protective clothing and gloves.

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

CONTAINS	CAS NUMBER	EC NUMBER	CONTENT
Thimerosal	54-64-8	200-210-4	0.2%

### Section 4: FIRST-AID MEASURES

**Description of first aid measures:**

- Skin and eyes:** In case of contact with eyes, wash or flush eyes as a precaution.
- Inhalation:** If inhaled, move to fresh air.
- Ingestion:** If ingested do not induce vomiting; rinse mouth with water.

### Section 5: FIRE-FIGHTING MEASURES

- Suitable extinguishing media:** Carbon dioxide extinguishing powder, dry chemicals, or water spray can be used for small fires. Fight larger fires with water spray or alcohol-resistant foam.
- Special hazards arising from the substance or mixture:** No further relevant information available.
- Advice for firefighters:** Wear self-contained breathing apparatus if necessary.

## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

COATING ANTIBODY

### Section 6: ACCIDENTAL RELEASE MEASURES


- Personal precautions:** Use proper personal protective equipment, avoid breathing vapors, mist, gas, or dust.
- Environmental precautions:** Avoid run-off to waterways and sewers.
- Containment/  
clean-up measures:** For spills and leaks, ventilate area of leak or spill. Absorb spill using an absorbent, noncombustible material and dispose of collected material according to local and regional regulations.

### Section 7: HANDLING AND STORAGE

- Precautions for  
safe handling:** Use only with adequate ventilation.  
Wear chemical-resistant gloves.
- Conditions for safe storage:** Store refrigerated at 4°C
- Incompatible materials:** N/A

### Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

**PEL:** This product does not contain any ingredients listed on OSHA PEL Threshold Limit Values.

**Personal protective  
equipment:** Wear chemical-resistant gloves. 

**General protective  
hygiene considerations:** Handle in accordance with good industrial hygiene and safety practice.  
Wash hands thoroughly with soap and water after handling and before eating or drinking.  
Safety shower and eye wash should be available and close to work areas.

**Environmental  
exposure controls:** Follow best practice for site management and disposal of waste.  
Avoid release into the environment.

### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear colorless liquid	<b>Vapor pressure</b>	Not available
<b>Odor</b>	Odorless	<b>Vapor density</b>	Not available
<b>Odor threshold</b>	Not available	<b>Relative density</b>	Not available
<b>pH</b>	Not available	<b>Solubility</b>	Complete
<b>Melting point</b>	Not available	<b>Partition coefficient</b>	Not available
<b>Freezing point</b>	Not available	<b>Auto-ignition temperature</b>	Not available
<b>Initial boiling point and range</b>	Not available	<b>Decomposition temperature</b>	Not available
<b>Flash point</b>	Not available	<b>Evaporation rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not available	<b>Viscosity</b>	Not available
<b>Upper/lower flammability or explosive limits</b>	Not available		

## SAFETY DATA SHEET (SDS)

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COATING ANTIBODY

### Section 10: STABILITY AND REACTIVITY

- Reactivity:** No data available
- Chemical stability:** Stable under recommended storage conditions.
- Possibility of hazardous reactions:** No data available
- Conditions to avoid:** No data available
- Incompatible materials:** No data available
- Hazardous decomposition products:** None

### Section 11: TOXICOLOGICAL INFORMATION

- Routes of entry/exposure:** Skin, eyes, ingestion
- Reproductive toxicity:** No data available
- Acute toxicity:** Oral Rat, LD50: 75mg/kg
- Acute effects on skin:** May cause skin irritation
- Chronic effects on skin:** No data available
- Acute effects on eyes:** May cause eye irritation
- Chronic effects on eyes:** No data available
- Carcinogenicity:** No data available
- Germ cell mutagenicity:** No data available
- Symptoms of chemical exposure:** None known

### Section 12: ECOLOGICAL INFORMATION

- Toxicity:** No data available
- Persistence and biodegradability:** No data available
- Bioaccumulative potential:** No data available
- Mobility in soil:** No data available
- Other adverse effects:** No data available on the adverse effects of this material on the environment.

### Section 13: DISPOSAL CONSIDERATIONS

- Product waste treatment:** Dispose of product waste in accordance with applicable national, regional, or local regulations.
- Packaging waste treatment:** Dispose of packaging waste in accordance with applicable national, regional, or local regulations.
- Precautions:** No data available

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COATING ANTIBODY

### Section 14: TRANSPORT INFORMATION

**DOT number:** Not a dangerous good

**UN number:** Not a dangerous good

**IMDG code:** Not a marine pollutant

**IATA code:** Not a dangerous good

### Section 15: REGULATORY INFORMATION

#### U.S. Federal and State Regulations:

**TSCA:** CAS# 54-64-8

**California proposition 65:** Not listed as one of California's known or potential carcinogens.

**CERCLA/SARA:** Not listed

**EU labeling:** EC #200-210-4

### Section 16: OTHER INFORMATION

The information and recommendations in this Safety Data Sheet are believed to be accurate as of the date of issue. Nothing herein shall be deemed to create a warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this data to formulate the necessary safety precautions, as well as to decide the suitability of the material or product for any particular purpose. This product is intended for use only by persons having necessary technical skills and facilities for its proper handling. Since the conditions and manner are outside of the control of Cellular Technology Limited (CTL), CTL shall not be held liable for any damage or injury resulting from the use, misuse, or mishandling of the above product, or the information contained in this Safety Data Sheet.

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## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

DETECTION ANTIBODY

### Section 1: IDENTIFICATION

- Product name:** **Detection Antibody** (ImmunoSpot® Kit)
- Product description:** Any Biotinylated or FITC-conjugated component used in any species of ImmunoSpot® Kits.
- Company name:** Cellular Technology Limited  
20521 Chagrin Boulevard  
Shaker Heights, OH 44122-5350 USA  
+1 216-791-5084 T • +1 216-751-1373 F  
+1 888-791-4005 Toll Free US  
kits@immunospot.com  
www.immunospot.com
- Recommended usage:** **Detection Antibodies** are used to detect cellular secretions in ELISPOT assays. For laboratory research use only. Not for use in diagnostic or therapeutic procedures.
- Emergency telephone:** +1 216-791-5084; +1 888-791-4005 Toll Free US

### Section 2: HAZARD(S) IDENTIFICATION

- Classification:** Solution containing between 0.09% sodium azide and 1% BSA as a carrier protein. Neither are considered hazardous at the concentration level used.
- GHS signal word:** Not a hazardous mixture
- Hazard statements:** Not a hazardous mixture
- Precautionary statements:** Not a hazardous mixture
- Response statements:** Not a hazardous mixture
- Risk phrases:** Not a hazardous mixture
- Safety phrases:** S36/S37 – Wear suitable protective clothing and gloves.

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

CONTAINS	CAS NUMBER	EC NUMBER	CONTENT
Sodium Azide	26628-22-8	247-852-1	0.09%
BSA	9048-46-8	232-936-2	0.2-1.0%

### Section 4: FIRST-AID MEASURES

**Description of first aid measures:**

- Skin and eyes:** In case of contact with eyes, wash or flush eyes as a precaution.
- Inhalation:** If inhaled, move to fresh air.
- Ingestion:** If ingested do not induce vomiting; rinse mouth with water.

### Section 5: FIRE-FIGHTING MEASURES

- Suitable extinguishing media:** Carbon dioxide extinguishing powder, dry chemicals, or water spray can be used for small fires. Fight larger fires with water spray or alcohol-resistant foam.
- Special hazards arising from the substance or mixture:** No further relevant information available.
- Advice for firefighters:** Wear self-contained breathing apparatus if necessary.

## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

DETECTION ANTIBODY


### Section 6: ACCIDENTAL RELEASE MEASURES

- Personal precautions:** Use proper personal protective equipment, avoid breathing vapors, mist, gas, or dust.
- Environmental precautions:** No precautions required
- Containment/clean-up measures:** For spills and leaks, ventilate area of leak or spill. Absorb spill using an absorbent, noncombustible material and dispose of collected material according to local and regional regulations.

### Section 7: HANDLING AND STORAGE

- Precautions for safe handling:** Use only with adequate ventilation.  
Wear chemical-resistant gloves.
- Conditions for safe storage:** Store refrigerated at 4°C
- Incompatible materials:** Strong oxidizing agents

### Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

- PEL:** This product does not contain any ingredients listed on OSHA PEL Threshold Limit Values.
- Personal protective equipment:** Wear chemical-resistant gloves 
- General protective hygiene considerations:** Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly with soap and water after handling and before eating or drinking. Safety shower and eye wash should be available and close to work areas.
- Environmental exposure controls:** Follow best practice for site management and disposal of waste.

### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear colorless liquid	<b>Vapor pressure</b>	Not available
<b>Odor</b>	Odorless	<b>Vapor density</b>	Not available
<b>Odor threshold</b>	Not available	<b>Relative density</b>	Not available
<b>pH</b>	Not available	<b>Solubility</b>	Complete
<b>Melting point</b>	Not available	<b>Partition coefficient</b>	Not available
<b>Freezing point</b>	Not available	<b>Auto-ignition temperature</b>	Not available
<b>Initial boiling point and range</b>	Not available	<b>Decomposition temperature</b>	Not available
<b>Flash point</b>	Not available	<b>Evaporation rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not available	<b>Viscosity</b>	Not available
<b>Upper/lower flammability or explosive limits</b>	Not available		

## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

DETECTION ANTIBODY

### Section 10: STABILITY AND REACTIVITY

- Reactivity:** No data available
- Chemical stability:** Stable under recommended storage conditions.
- Possibility of hazardous reactions:** No data available
- Conditions to avoid:** No data available
- Incompatible materials:** Strong oxidizing agents
- Hazardous decomposition products:** None

### Section 11: TOXICOLOGICAL INFORMATION

- Routes of entry/exposure:** Skin, eyes, ingestion
- Reproductive toxicity:** No data available
- Acute toxicity:** Sodium Azide: Oral Rat, LD50: 27mg/kg
- Acute effects on skin:** May cause skin irritation
- Chronic effects on skin:** No data available
- Acute effects on eyes:** May cause eye irritation
- Chronic effects on eyes:** No data available
- Carcinogenicity:** No data available
- Germ cell mutagenicity:** No data available
- Symptoms of chemical exposure:** None known

### Section 12: ECOLOGICAL INFORMATION

- Toxicity:** No data available
- Persistence and biodegradability:** No data available
- Bioaccumulative potential:** No data available
- Mobility in soil:** No data available
- Other adverse effects:** No data available on the adverse effects of this material on the environment.

### Section 13: DISPOSAL CONSIDERATIONS

- Product waste treatment:** Dispose of product waste in accordance with applicable national, regional, or local regulations.
- Packaging waste treatment:** Dispose of packaging waste in accordance with applicable national, regional, or local regulations.
- Precautions:** No data available

## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

**DETECTION ANTIBODY**

### Section 14: TRANSPORT INFORMATION

- DOT number:** Not a dangerous good  
**UN number:** Not a dangerous good  
**IMDG code:** Not a marine pollutant  
**IATA code:** Not a dangerous good

### Section 15: REGULATORY INFORMATION

#### U.S. Federal and State Regulations:

**TSCA:** CAS# 26628-22-8, Sodium Azide  
CAS# 9048-46-8, BSA

**California proposition 65:** Not listed as one of California's known or potential carcinogens.

**CERCLA/SARA:** Not listed

**EU labeling:** EC #247-852-1, Sodium Azide  
EC #232-936-2, BSA

### Section 16: OTHER INFORMATION

The information and recommendations in this Safety Data Sheet are believed to be accurate as of the date of issue. Nothing herein shall be deemed to create a warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this data to formulate the necessary safety precautions, as well as to decide the suitability of the material or product for any particular purpose. This product is intended for use only by persons having necessary technical skills and facilities for its proper handling. Since the conditions and manner are outside of the control of Cellular Technology Limited (CTL), CTL shall not be held liable for any damage or injury resulting from the use, misuse, or mishandling of the above product, or the information contained in this Safety Data Sheet.

Issued 12-01-15

## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

TERTIARY REAGENT

### Section 1: IDENTIFICATION

- Product name:** Tertiary Reagent (ImmunoSpot® Kit)
- Product description:** CTL-Strep-Red™ and CTL-Strep-Blue™ are components used in any species of multicolor fluorescent ImmunoSpot® Kits
- Company name:** Cellular Technology Limited  
20521 Chagrin Boulevard  
Shaker Heights, OH 44122-5350 USA  
+1 216-791-5084 T • +1 216-751-1373 F  
+1 888-791-4005 Toll Free US  
kits@immunospot.com  
www.immunospot.com
- Recommended usage:** Tertiary Reagents are used to detect cellular secretions in ELISPOT assays. For laboratory research use only. Not for use in diagnostic or therapeutic procedures.
- Emergency telephone:** +1 216-791-5084; +1 888-791-4005 Toll Free US

### Section 2: HAZARD(S) IDENTIFICATION

- Classification:** Solution containing between 0.09% sodium azide; not considered hazardous at the concentration level used.
- GHS signal word:** Not a hazardous mixture
- Hazard statements:** Not a hazardous mixture
- Precautionary statements:** Not a hazardous mixture
- Response statements:** Not a hazardous mixture
- Risk phrases:** Not a hazardous mixture
- Safety phrases:** S36/S37 – Wear suitable protective clothing and gloves.

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

CONTAINS	CAS NUMBER	EC NUMBER	CONTENT
Sodium Azide	26628-22-8	247-852-1	0.09%

### Section 4: FIRST-AID MEASURES

**Description of first aid measures:**

- Skin and eyes:** In case of contact with eyes, wash or flush eyes as a precaution.
- Inhalation:** If inhaled, move to fresh air.
- Ingestion:** If ingested do not induce vomiting; rinse mouth with water.

### Section 5: FIRE-FIGHTING MEASURES

- Suitable extinguishing media:** Carbon dioxide extinguishing powder, dry chemicals, or water spray can be used for small fires. Fight larger fires with water spray or alcohol-resistant foam.
- Special hazards arising from the substance or mixture:** No further relevant information available.
- Advice for firefighters:** Wear self-contained breathing apparatus if necessary.

## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

TERTIARY REAGENT


### Section 6: ACCIDENTAL RELEASE MEASURES

- Personal precautions:** Use proper personal protective equipment, avoid breathing vapors, mist, gas, or dust.
- Environmental precautions:** No precautions required
- Containment/ clean-up measures:** For spills and leaks, ventilate area of leak or spill. Absorb spill using an absorbent, noncombustible material and dispose of collected material according to local and regional regulations.

### Section 7: HANDLING AND STORAGE

- Precautions for safe handling:** Use only with adequate ventilation. Wear chemical-resistant gloves.
- Conditions for safe storage:** Store refrigerated at 4°C
- Incompatible materials:** Strong oxidizing agents

### Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

- PEL:** This product does not contain any ingredients listed on OSHA PEL Threshold Limit Values
- Personal protective equipment:** Wear chemical-resistant gloves 
- General protective hygiene considerations:** Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly with soap and water after handling and before eating or drinking. Safety shower and eye wash should be available and close to work areas.
- Environmental exposure controls:** Follow best practice for site management and disposal of waste.

### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear colorless liquid	<b>Vapor pressure</b>	Not available
<b>Odor</b>	Odorless	<b>Vapor density</b>	Not available
<b>Odor threshold</b>	Not available	<b>Relative density</b>	Not available
<b>pH</b>	Not available	<b>Solubility</b>	Complete
<b>Melting point</b>	Not available	<b>Partition coefficient</b>	Not available
<b>Freezing point</b>	Not available	<b>Auto-ignition temperature</b>	Not available
<b>Initial boiling point and range</b>	Not available	<b>Decomposition temperature</b>	Not available
<b>Flash point</b>	Not available	<b>Evaporation rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not available	<b>Viscosity</b>	Not available
<b>Upper/lower flammability or explosive limits</b>	Not available		

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TERTIARY REAGENT

### Section 10: STABILITY AND REACTIVITY

- Reactivity:** No data available
- Chemical stability:** Stable under recommended storage conditions.
- Possibility of hazardous reactions:** No data available
- Conditions to avoid:** No data available
- Incompatible materials:** Strong oxidizing agents
- Hazardous decomposition products:** None

### Section 11: TOXICOLOGICAL INFORMATION

- Routes of entry/exposure:** Skin, eyes, ingestion
- Reproductive toxicity:** No data available
- Acute toxicity:** Oral Rat, LD50: 27mg/kg
- Acute effects on skin:** May cause skin irritation
- Chronic effects on skin:** No data available
- Acute effects on eyes:** May cause eye irritation
- Chronic effects on eyes:** No data available
- Carcinogenicity:** No data available
- Germ cell mutagenicity:** No data available
- Symptoms of chemical exposure:** None known

### Section 12: ECOLOGICAL INFORMATION

- Toxicity:** No data available
- Persistence and biodegradability:** No data available
- Bioaccumulative potential:** No data available
- Mobility in soil:** No data available
- Other adverse effects:** No data available on the adverse effects of this material on the environment.

### Section 13: DISPOSAL CONSIDERATIONS

- Product waste treatment:** Dispose of product waste in accordance with applicable national, regional, or local regulations.
- Packaging waste treatment:** Dispose of packaging waste in accordance with applicable national, regional, or local regulations.
- Precautions:** No data available

## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

TERTIARY REAGENT

### Section 14: TRANSPORT INFORMATION

**DOT number:** Not a dangerous good

**UN number:** Not a dangerous good

**IMDG code:** Not a marine pollutant

**IATA code:** Not a dangerous good

### Section 15: REGULATORY INFORMATION

**U.S. federal and state regulations:**

**TSCA:** CAS# 26628-22-8

**California proposition 65:** Not listed as one of California's known or potential carcinogens.

**CERCLA/SARA:** Not listed

**EU labeling:** EC# 247-852-1

### Section 16: OTHER INFORMATION

The information and recommendations in this Safety Data Sheet are believed to be accurate as of the date of issue. Nothing herein shall be deemed to create a warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this data to formulate the necessary safety precautions, as well as to decide the suitability of the material or product for any particular purpose. This product is intended for use only by persons having necessary technical skills and facilities for its proper handling. Since the conditions and manner are outside of the control of Cellular Technology Limited (CTL), CTL shall not be held liable for any damage or injury resulting from the use, misuse, or mishandling of the above product, or the information contained in this Safety Data Sheet.

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## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

DILUENT C

### Section 1: IDENTIFICATION

- Product name:** Diluent C (ImmunoSpot® Kit)
- Product description:** A component used in all ImmunoSpot® Kits.
- Company name:** Cellular Technology Limited  
20521 Chagrin Boulevard  
Shaker Heights, OH 44122-5350 USA  
+1 216-791-5084 T • +1 216-751-1373 F  
+1 888-791-4005 Toll Free US  
kits@immunospot.com  
www.immunospot.com
- Recommended usage:** Diluent C is used to detect cellular secretions in ELISPOT assays.  
For laboratory research use only. Not for use in diagnostic or therapeutic procedures.
- Emergency telephone:** +1 216-791-5084; +1 888-791-4005 Toll Free US

### Section 2: HAZARD(S) IDENTIFICATION

- Classification:** Solution containing 1% BSA as a carrier protein; not considered hazardous at the concentration level used.
- GHS signal word:** Not a hazardous mixture
- Hazard statements:** Not a hazardous mixture
- Precautionary statements:** Not a hazardous mixture
- Response statements:** Not a hazardous mixture
- Risk phrases:** Not a hazardous mixture
- Safety phrases:** S36/S37 – Wear suitable protective clothing and gloves.

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

CONTAINS	CAS NUMBER	EC NUMBER	CONTENT
BSA	9048-46-8	232-936-2	1.0%

### Section 4: FIRST-AID MEASURES

**Description of first aid measures:**

**Skin and eyes:** In case of contact with eyes, wash or flush eyes as a precaution.

**Inhalation:** If inhaled, move to fresh air.

**Ingestion:** If ingested do not induce vomiting; rinse mouth with water.

### Section 5: FIRE-FIGHTING MEASURES

**Suitable extinguishing media:** Carbon dioxide extinguishing powder, dry chemicals, or water spray can be used for small fires. Fight larger fires with water spray or alcohol-resistant foam.

**Special hazards arising from the substance or mixture:** No further relevant information available.

**Advice for firefighters:** Wear self-contained breathing apparatus if necessary.

## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

DILUENT C


### Section 6: ACCIDENTAL RELEASE MEASURES

- Personal precautions:** Use proper personal protective equipment, avoid breathing vapors, mist, gas, or dust.
- Environmental precautions:** No precautions required
- Containment/clean-up measures:** For spills and leaks, ventilate area of leak or spill. Absorb spill using an absorbent, noncombustible material and dispose of collected material according to local and regional regulations.

### Section 7: HANDLING AND STORAGE

- Precautions for safe handling:** Use only with adequate ventilation. Wear chemical-resistant gloves.
- Conditions for safe storage:** Store refrigerated at 4°C
- Incompatible materials:** N/A

### Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

- PEL:** This product does not contain any ingredients listed on OSHA PEL Threshold Limit Values.
- Personal protective equipment:** Wear chemical-resistant gloves 
- General protective hygiene considerations:** Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly with soap and water after handling and before eating or drinking. Safety shower and eye wash should be available and close to work areas.
- Environmental exposure controls:** Follow best practice for site management and disposal of waste.

### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear colorless liquid	<b>Vapor pressure</b>	Not available
<b>Odor</b>	Odorless	<b>Vapor density</b>	Not available
<b>Odor threshold</b>	Not available	<b>Relative density</b>	Not available
<b>pH</b>	Not available	<b>Solubility</b>	Complete
<b>Melting point</b>	Not available	<b>Partition coefficient</b>	Not available
<b>Freezing point</b>	Not available	<b>Auto-ignition temperature</b>	Not available
<b>Initial boiling point and range</b>	Not available	<b>Decomposition temperature</b>	Not available
<b>Flash point</b>	Not available	<b>Evaporation rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not available	<b>Viscosity</b>	Not available
<b>Upper/lower flammability or explosive limits</b>	Not available		

## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

DILUENT C

### Section 10: STABILITY AND REACTIVITY

- Reactivity:** No data available
- Chemical stability:** Stable under recommended storage conditions.
- Possibility of hazardous reactions:** No data available
- Conditions to avoid:** No data available
- Incompatible materials:** No data available
- Hazardous decomposition products:** None

### Section 11: TOXICOLOGICAL INFORMATION

- Routes of entry/exposure:** Skin, eyes, ingestion
- Reproductive toxicity:** No data available
- Acute toxicity:** No data available
- Acute effects on skin:** May cause skin irritation
- Chronic effects on skin:** No data available
- Acute effects on eyes:** May cause eye irritation
- Chronic effects on eyes:** No data available
- Carcinogenicity:** No data available
- Germ cell mutagenicity:** No data available
- Symptoms of chemical exposure:** None known

### Section 12: ECOLOGICAL INFORMATION

- Toxicity:** No data available
- Persistence and biodegradability:** No data available
- Bioaccumulative potential:** No data available
- Mobility in soil:** No data available
- Other adverse effects:** No data available on the adverse effects of this material on the environment.

### Section 13: DISPOSAL CONSIDERATIONS

- Product waste treatment:** Dispose of product waste in accordance with applicable national, regional, or local regulations.
- Packaging waste treatment:** Dispose of packaging waste in accordance with applicable national, regional, or local regulations.
- Precautions:** No data available

## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

**DILUENT C**

### Section 14: TRANSPORT INFORMATION

**DOT number:** Not a dangerous good  
**UN number:** Not a dangerous good  
**IMDG code:** Not a marine pollutant  
**IATA code:** Not a dangerous good

### Section 15: REGULATORY INFORMATION

**U.S. federal and state regulations:**

**TSCA:** CAS# 9048-46-8

**California proposition 65:** Not listed as one of California's known or potential carcinogens.

**CERCLA/SARA:** Not listed

**EU labeling:** EC# 232-936-2

### Section 16: OTHER INFORMATION

The information and recommendations in this Safety Data Sheet are believed to be accurate as of the date of issue. Nothing herein shall be deemed to create a warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this data to formulate the necessary safety precautions, as well as to decide the suitability of the material or product for any particular purpose. This product is intended for use only by persons having necessary technical skills and facilities for its proper handling. Since the conditions and manner are outside of the control of Cellular Technology Limited (CTL), CTL shall not be held liable for any damage or injury resulting from the use, misuse, or mishandling of the above product, or the information contained in this Safety Data Sheet.

Issued 12-01-15

## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

**DILUENT B**

### Section 1: IDENTIFICATION

- Product name:** Diluent B (ImmunoSpot® Kit)
- Product Description:** A component used in all ImmunoSpot® Kits.
- Company name:** Cellular Technology Limited  
20521 Chagrin Boulevard  
Shaker Heights, OH 44122-5350 USA  
+1 216-791-5084 T • +1 216-751-1373 F  
+1 888-791-4005 Toll Free US  
kits@immunospot.com  
www.immunospot.com
- Recommended usage:** Diluent B is used to detect cellular secretions in ELISPOT assays.  
For laboratory research use only. Not for use in diagnostic or therapeutic procedures.
- Emergency telephone:** +1 216-791-5084; +1 888-791-4005 Toll Free US

### Section 2: HAZARD(S) IDENTIFICATION

- Classification:** Solution containing between 0.05% Tween 20 and 1% BSA as a carrier protein; neither of which are considered hazardous at the concentration level used.
- GHS signal word:** Not a hazardous mixture
- Hazard statements:** Not a hazardous mixture
- Precautionary statements:** Not a hazardous mixture
- Response statements:** Not a hazardous mixture
- Risk phrases:** Not a hazardous mixture
- Safety phrases:** S36/S37 – Wear suitable protective clothing and gloves.

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

CONTAINS	CAS NUMBER	EC NUMBER	CONTENT
Tween 20	9005-64-5	500-018-3	0.05%
BSA	9048-46-8	232-936-2	1.0%

### Section 4: FIRST-AID MEASURES

**Description of first aid measures:**

- Skin and eyes:** In case of contact with eyes, wash or flush eyes as a precaution.
- Inhalation:** If inhaled, move to fresh air.
- Ingestion:** If ingested do not induce vomiting; rinse mouth with water.

### Section 5: FIRE-FIGHTING MEASURES

- Suitable extinguishing media:** Carbon dioxide extinguishing powder, dry chemicals, or water spray can be used for small fires. Fight larger fires with water spray or alcohol-resistant foam.
- Special hazards arising from the substance or mixture:** Carbon oxides
- Advice for firefighters:** Wear self-contained breathing apparatus if necessary.

## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

**DILUENT B**


### Section 6: ACCIDENTAL RELEASE MEASURES

- Personal precautions:** Use proper personal protective equipment, avoid breathing vapors, mist, gas, or dust.
- Environmental precautions:** No precautions required
- Containment/ clean-up measures:** For spills and leaks, ventilate area of leak or spill. Absorb spill using an absorbent, noncombustible material and dispose of collected material according to local and regional regulations.

### Section 7: HANDLING AND STORAGE

- Precautions for safe handling:** Use only with adequate ventilation. Wear chemical-resistant gloves.
- Conditions for safe storage:** Store refrigerated at 4°C
- Incompatible materials:** Strong oxidizing agents

### Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

- PEL:** This product does not contain any ingredients listed on OSHA PEL Threshold Limit Values.
- Personal protective equipment:** Wear chemical-resistant gloves 
- General protective hygiene considerations:** Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly with soap and water after handling and before eating or drinking. Safety shower and eye wash should be available and close to work areas.
- Environmental exposure controls:** Follow best practice for site management and disposal of waste. Avoid release into drains and the environment.

### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear colorless liquid	<b>Vapor pressure</b>	Not available
<b>Odor</b>	Odorless	<b>Vapor density</b>	Not available
<b>Odor threshold</b>	Not available	<b>Relative density</b>	Not available
<b>pH</b>	Not available	<b>Solubility</b>	Complete
<b>Melting point</b>	Not available	<b>Partition coefficient</b>	Not available
<b>Freezing point</b>	Not available	<b>Auto-ignition temperature</b>	Not available
<b>Initial boiling point and range</b>	Not available	<b>Decomposition temperature</b>	Not available
<b>Flash point</b>	Not available	<b>Evaporation rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not available	<b>Viscosity</b>	Not available
<b>Upper/lower flammability or explosive limits</b>	Not available		

## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

**DILUENT B**

### Section 10: STABILITY AND REACTIVITY

- Reactivity:** No data available
- Chemical stability:** Stable under recommended storage conditions.
- Possibility of hazardous reactions:** No data available
- Conditions to avoid:** No data available
- Incompatible materials:** Strong oxidizing agents
- Hazardous decomposition products:** None

### Section 11: TOXICOLOGICAL INFORMATION

- Routes of entry/exposure:** Skin, eyes, ingestion
- Reproductive toxicity:** No data available
- Acute toxicity:** Oral Rat, LD50, 40: 554mg/kg
- Acute effects on skin:** May cause skin irritation
- Chronic effects on skin:** No data available
- Acute effects on eyes:** May cause eye irritation
- Chronic effects on eyes:** No data available
- Carcinogenicity:** No data available
- Germ cell mutagenicity:** No data available
- Symptoms of chemical exposure:** None known

### Section 12: ECOLOGICAL INFORMATION

- Toxicity:** No data available
- Persistence and biodegradability:** No data available
- Bioaccumulative potential:** No data available
- Mobility in soil:** No data available
- Other adverse effects:** No data available on the adverse effects of this material on the environment.

### Section 13: DISPOSAL CONSIDERATIONS

- Product waste treatment:** Dispose of product waste in accordance with applicable national, regional, or local regulations.
- Packaging waste treatment:** Dispose of packaging waste in accordance with applicable national, regional, or local regulations.
- Precautions:** No data available

## SAFETY DATA SHEET (SDS)

OSHA HCS 29 CFR 1910.1200(g) and GHS Rev 06

**DILUENT B**

### Section 14: TRANSPORT INFORMATION

**DOT number:** Not a dangerous good  
**UN number:** Not a dangerous good  
**IMDG code:** Not a marine pollutant  
**IATA code:** Not a dangerous good

### Section 15: REGULATORY INFORMATION

#### U.S. federal and state regulations:

**TSCA:** CAS# 9005-64-5, Tween 20  
CAS# 9048-46-8, BSA

**California proposition 65:** Not listed as one of California's known or potential carcinogens.

**CERCLA/SARA:** Not listed

**EU labeling:** EC #500-018-3, Tween 20  
EC #232-936-2, BSA

### Section 16: OTHER INFORMATION

The information and recommendations in this Safety Data Sheet are believed to be accurate as of the date of issue. Nothing herein shall be deemed to create a warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this data to formulate the necessary safety precautions, as well as to decide the suitability of the material or product for any particular purpose. This product is intended for use only by persons having necessary technical skills and facilities for its proper handling. Since the conditions and manner are outside of the control of Cellular Technology Limited (CTL), CTL shall not be held liable for any damage or injury resulting from the use, misuse, or mishandling of the above product, or the information contained in this Safety Data Sheet.

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