



**Trade Name: MiniOne Let it Glow™ Bacterial Transformation MiniLab®**

**MSDS**

**Revision Date: February 5<sup>th</sup>, 2024**

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**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY**

**Product Code:** M6300  
**Trade Name:** MiniOne® MiniLabs™  
**Chemical Name:**  
**Synonym:** Let it Glow™ Bacterial Transformation MiniLab

**Company Identification:** Embi Tec or The MiniOne Systems  
7738 Arjons Drive  
San Diego, CA 92126  
USA  
858-684-3190

**SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

This experimental lab kit includes various chemicals & ingredients, please refer to the corresponding sections for the specific MSDS.

1. LB agar media
2. BL21 E. Coli stock culture
3. LB Broth medium
4. eGFP Plasmid DNA Solution
5. Calcium Chloride solution
6. Ampicillin solution
7. Lactose solution

This product is sold for educational purposes only. It is not intended for research, food, drug, household, agricultural, or cosmetic use. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may be present unknown hazards and should be used with caution. Since Embi Tec and The MiniOne Systems cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

**THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.**

End of Material Safety Data Sheet



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

## **MSDS**

**Revision Date: February 5<sup>th</sup>, 2024**

### **SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY**

**Product Code:** M6300  
**Trade Name:** MiniOne® Let it Glow Bacterial Transformation MiniLab  
**Chemical Name:** LB agar media  
**Company Identification:** Embi Tec or The MiniOne Systems  
7738 Arjons Drive  
San Diego, CA 92126  
USA  
858-684-3190

### **SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

This experimental lab kit includes the following substances/chemical(s) listed below & various plastic accessories.

**Mixtures:** This product contains a small amount of LB broth powder dissolved in water.

Overall, this product contains no substances which at their given concentration are considered to be hazardous to health.

### **SECTION 3: HAZARDS IDENTIFICATION**

**Emergency Overview:** May cause sensitization by skin contact. An eye irritant.

**Potential Health Effects:**

**Eyes** Direct contact can cause eye irritation including redness, tearing & pain.  
**Skin** May cause mild irritation in susceptible persons  
**Ingestion** May cause gastrointestinal irritation, nausea & discomfort

### **SECTION 4: FIRST AID MEASURES**

**Description of first aid measures:**

**Skin contact:** Wash off immediately with plenty of water  
**Eye contact:** Rinse immediately with plenty of water as a precaution, also under the eyelids  
**Ingestion:** Get medical attention immediately; never give anything by mouth to an unconscious person; rinse mouth with water  
**Inhalation:** Move to fresh air  
**Notes To physician:** Treat symptomatically

### **SECTION 5: FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:** Carbon dioxide  
**Special Hazards Arising from Substance/Mixture:** No data available  
**Special Protective Equipment for Firefighters:** Wear self-contained breathing apparatus and protective suit if necessary.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

**Personal Precautions:** Use personal protective equipment  
**Methods for Cleaning Up:** Soak up with inert absorbent material, if needed. Dispose of properly.

**SECTION 7: HANDLING AND STORAGE**

**Handling:** Avoid contact with eyes, skin, and clothing. Do not swallow. Wash thoroughly after handling.  
**Storage:** Keep in properly labeled containers.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control Parameters:** Contains no substance with occupational exposure limit values.  
**Exposure Limit Values:** None established  
**Exposure Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls as needed.  
**Respiratory Protection:** Not required. If prefer, use an approved air-purifying respirator.  
**Eye/Face Protection:** Use safety glasses or chemical goggles.  
**Skin/Hand Protection:** Use chemical gloves as needed. Wear lightweight protective clothing.  
**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.  
**Environmental Exposure Controls:** Prevent product from entering drains

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Yellowish solid  
**Odor:** Data not available  
**Flash Point:** Data not available  
**Viscosity:** Data not available  
**Solubility:** Data not available  
**Density:** Data not available  
**Boiling Point:** Data not available  
**Melting Point:** Data not available  
**pH:** Data not available

**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity:** Data not available  
**Stability:** Stable under recommended storage conditions  
**Materials to Avoid:** Data not available  
**Polymerization:** Data not available

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Oral:** No information available  
**Inhalation:** No information available  
**Dermal:** No information available

**SECTION 12: ECOLOGICAL INFORMATION**

**Eco toxicity:** No information available  
**Mobility:** No information available



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

**Biodegradation:** No information available  
**Bioaccumulation:** No information available

**SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose of in accordance with local regulations; offer surplus to a licensed disposal company if necessary.

**SECTION 14: TRANSPORT INFORMATION**

**DOT (US):** Not dangerous goods  
**IMDG:** Not dangerous goods  
**IATA Proper Shipping Name:** Not classified as dangerous in the meaning of transport regulations  
**IATA Hazard Class:** Not classified as hazardous for transport

**SECTION 15: REGULATORY INFORMATION**

**US Federal Regulations:**

**SARA 302 Components:**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/12 Hazards**

No SARA Hazards

**SECTION 16: OTHER INFORMATION**

This product is sold for educational purposes only. It is not intended for research, food, drug, household, agricultural, or cosmetic use. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may be present unknown hazards and should be used with caution. Since Embi Tec and The MiniOne Systems cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

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End of Material Safety Data Sheet



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

## **MSDS**

**Revision Date: February 5<sup>th</sup>, 2024**

### **SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY**

**Product Code:** M6300  
**Trade Name:** MiniOne® Let it Glow Bacterial Transformation MiniLab  
**Chemical Name:** BL21 E. Coli stock culture  
**Company Identification:** Embi Tec or The MiniOne Systems  
7738 Arjons Drive  
San Diego, CA 92126  
USA  
858-684-3190

### **SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

This experimental lab kit includes the following substances/chemical(s) listed below & various plastic accessories.

**Substances:** This product contains BL21 E. Coli on a LB agar media. Overall, this product contains no substances which at their given concentration are considered to be hazardous to health.

### **SECTION 3: HAZARDS IDENTIFICATION**

**Emergency Overview:** May cause sensitization by skin contact. An eye irritant.

**Potential Health Effects:**

**Eyes** Direct contact can cause eye irritation including redness, tearing & pain.  
**Skin** May cause mild irritation in susceptible persons  
**Ingestion** May cause gastrointestinal irritation, nausea & discomfort

### **SECTION 4: FIRST AID MEASURES**

**Description of first aid measures:**

**Skin contact:** Wash off immediately with plenty of water  
**Eye contact:** Rinse immediately with plenty of water as a precaution, also under the eyelids  
**Ingestion:** Get medical attention immediately; never give anything by mouth to an unconscious person; rinse mouth with water  
**Inhalation:** Move to fresh air  
**Notes To physician:** Treat symptomatically

### **SECTION 5: FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:** Carbon dioxide  
**Special Hazards Arising from Substance/Mixture:** No data available  
**Special Protective Equipment for Firefighters:** Wear self-contained breathing apparatus and protective suit if necessary.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Use personal protective equipment



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

**Methods for Cleaning Up:** Soak up with inert absorbent material, if needed. Dispose of properly.

**SECTION 7: HANDLING AND STORAGE**

**Handling:** Avoid contact with eyes, skin, and clothing. Do not swallow. Wash thoroughly after handling.  
**Storage:** Keep in properly labeled containers.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control Parameters:** Contains no substance with occupational exposure limit values.  
**Exposure Limit Values:** None established  
**Exposure Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls as needed.  
**Respiratory Protection:** Not required. If prefer, use an approved air-purifying respirator.  
**Eye/Face Protection:** Use safety glasses or chemical goggles.  
**Skin/Hand Protection:** Use chemical gloves as needed. Wear lightweight protective clothing.  
**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.  
**Environmental Exposure Controls:** Prevent product from entering drains

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Solid  
**Odor:** Data not available  
**Flash Point:** Data not available  
**Viscosity:** Data not available  
**Solubility:** Data not available  
**Density:** Data not available  
**Boiling Point:** Data not available  
**Melting Point:** Data not available  
**pH:** Data not available

**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity:** Data not available  
**Stability:** Stable under recommended storage conditions  
**Materials to Avoid:** Data not available  
**Polymerization:** Data not available

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Oral:** No information available  
**Inhalation:** No information available  
**Dermal:** No information available

**SECTION 12: ECOLOGICAL INFORMATION**

**Eco toxicity:** No information available  
**Mobility:** No information available  
**Biodegradation:** No information available



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

**Bioaccumulation:** No information available

### **SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose of in accordance with local regulations; offer surplus to a licensed disposal company if necessary.

### **SECTION 14: TRANSPORT INFORMATION**

**DOT (US):** Not dangerous goods

**IMDG:** Not dangerous goods

**IATA Proper Shipping Name:** Not classified as dangerous in the meaning of transport regulations

**IATA Hazard Class:** Not classified as hazardous for transport

### **SECTION 15: REGULATORY INFORMATION**

**US Federal Regulations:**

**SARA 302 Components:**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/12 Hazards**

No SARA Hazards

### **SECTION 16: OTHER INFORMATION**

This product is sold for educational purposes only. It is not intended for research, food, drug, household, agricultural, or cosmetic use. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may be present unknown hazards and should be used with caution. Since Embi Tec and The MiniOne Systems cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

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**End of Material Safety Data Sheet**



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

## **MSDS**

**Revision Date: February 5<sup>th</sup>, 2024**

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### **SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY**

**Product Code:** M6300  
**Trade Name:** MiniOne® Let it Glow Bacterial Transformation MiniLab  
**Chemical Name:** LB Broth medium  
**Company Identification:** Embi Tec or The MiniOne Systems  
7738 Arjons Drive  
San Diego, CA 92126  
USA  
858-684-3190

### **SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

This experimental lab kit includes the following substances/chemical(s) listed below & various plastic accessories.

**Mixtures:** This product contains a small amount of LB broth powder dissolved in water.

Overall, this product contains no substances which at their given concentration are considered to be hazardous to health.

### **SECTION 3: HAZARDS IDENTIFICATION**

**Emergency Overview:** May cause sensitization by skin contact. An eye irritant.

**Potential Health Effects:**

**Eyes** Direct contact can cause eye irritation including redness, tearing & pain.  
**Skin** May cause mild irritation in susceptible persons  
**Ingestion** May cause gastrointestinal irritation, nausea & discomfort

### **SECTION 4: FIRST AID MEASURES**

**Description of first aid measures:**

**Skin contact:** Wash off immediately with plenty of water  
**Eye contact:** Rinse immediately with plenty of water as a precaution, also under the eyelids  
**Ingestion:** Get medical attention immediately; never give anything by mouth to an unconscious person; rinse mouth with water  
**Inhalation:** Move to fresh air  
**Notes To physician:** Treat symptomatically

### **SECTION 5: FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:** Carbon dioxide  
**Special Hazards Arising from Substance/Mixture:** No data available  
**Special Protective Equipment for Firefighters:** Wear self-contained breathing apparatus and protective suit if necessary.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

**Personal Precautions:** Use personal protective equipment  
**Methods for Cleaning Up:** Soak up with inert absorbent material, if needed. Dispose of properly.

**SECTION 7: HANDLING AND STORAGE**

**Handling:** Avoid contact with eyes, skin, and clothing. Do not swallow. Wash thoroughly after handling.  
**Storage:** Keep in properly labeled containers. Stored at 4 °C - 25 °C (recommended).

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control Parameters:** Contains no substance with occupational exposure limit values.  
**Exposure Limit Values:** None established  
**Exposure Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls as needed.  
**Respiratory Protection:** Not required. If prefer, use an approved air-purifying respirator.  
**Eye/Face Protection:** Use safety glasses or chemical goggles.  
**Skin/Hand Protection:** Use chemical gloves as needed. Wear lightweight protective clothing.  
**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.  
**Environmental Exposure Controls:** Prevent product from entering drains

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Yellow to brown liquid  
**Odor:** Data not available  
**Flash Point:** Data not available  
**Viscosity:** Data not available  
**Solubility:** Data not available  
**Density:** Data not available  
**Boiling Point:** Data not available  
**Melting Point:** Data not available  
**pH:** Data not available

**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity:** Data not available  
**Stability:** Stable under recommended storage conditions  
**Materials to Avoid:** Data not available  
**Polymerization:** Data not available

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Oral:** No information available  
**Inhalation:** No information available  
**Dermal:** No information available

**SECTION 12: ECOLOGICAL INFORMATION**

**Eco toxicity:** No information available  
**Mobility:** No information available



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

**Biodegradation:** No information available  
**Bioaccumulation:** No information available

**SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose of in accordance with local regulations; offer surplus to a licensed disposal company if necessary.

**SECTION 14: TRANSPORT INFORMATION**

**DOT (US):** Not dangerous goods  
**IMDG:** Not dangerous goods  
**IATA Proper Shipping Name:** Not classified as dangerous in the meaning of transport regulations  
**IATA Hazard Class:** Not classified as hazardous for transport

**SECTION 15: REGULATORY INFORMATION**

**US Federal Regulations:**

**SARA 302 Components:**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/12 Hazards**

No SARA Hazards

**SECTION 16: OTHER INFORMATION**

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End of Material Safety Data Sheet



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

## **MSDS**

**Revision Date: February 5<sup>th</sup>, 2024**

### **SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY**

**Product Code:** M6300  
**Trade Name:** MiniOne® Let it Glow Bacterial Transformation MiniLab  
**Chemical Name:** eGFP Plasmid DNA Solution  
**Company Identification:** Embi Tec or The MiniOne Systems  
7738 Arjons Drive  
San Diego, CA 92126  
USA  
858-684-3190

### **SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

This experimental lab kit includes the following substances/chemical(s) listed below & various plastic accessories.

**Substances:** This product contains <20 ng/μl of DNA solution in 1XTE buffer. Overall, this product contains no substances which at their given concentration are considered to be hazardous to health.

### **SECTION 3: HAZARDS IDENTIFICATION**

**Emergency Overview:** May cause sensitization by skin contact. An eye irritant.

**Potential Health Effects:**

**Eyes** Direct contact can cause eye irritation including redness, tearing & pain.  
**Skin** May cause mild irritation in susceptible persons  
**Ingestion** May cause gastrointestinal irritation, nausea & discomfort

### **SECTION 4: FIRST AID MEASURES**

**Description of first aid measures:**

**Skin contact:** Wash off immediately with plenty of water  
**Eye contact:** Rinse immediately with plenty of water as a precaution, also under the eyelids  
**Ingestion:** Get medical attention immediately; never give anything by mouth to an unconscious person; rinse mouth with water  
**Inhalation:** Move to fresh air  
**Notes To physician:** Treat symptomatically

### **SECTION 5: FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:** Carbon dioxide  
**Special Hazards Arising from Substance/Mixture:** No data available  
**Special Protective Equipment for Firefighters:** Wear self-contained breathing apparatus and protective suit if necessary.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Use personal protective equipment



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

**Methods for Cleaning Up:** Soak up with inert absorbent material, if needed. Dispose of properly.

**SECTION 7: HANDLING AND STORAGE**

**Handling:** Avoid contact with eyes, skin, and clothing. Do not swallow. Wash thoroughly after handling.  
**Storage:** Keep in properly labeled containers.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control Parameters:** Contains no substance with occupational exposure limit values.  
**Exposure Limit Values:** None established  
**Exposure Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls as needed.  
**Respiratory Protection:** Not required. If prefer, use an approved air-purifying respirator.  
**Eye/Face Protection:** Use safety glasses or chemical goggles.  
**Skin/Hand Protection:** Use chemical gloves as needed. Wear lightweight protective clothing.  
**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.  
**Environmental Exposure Controls:** Prevent product from entering drains

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Liquid  
**Odor:** Data not available  
**Flash Point:** Data not available  
**Viscosity:** Data not available  
**Solubility:** Data not available  
**Density:** Data not available  
**Boiling Point:** Data not available  
**Melting Point:** Data not available  
**pH:** Data not available

**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity:** Data not available  
**Stability:** Stable under recommended storage conditions  
**Materials to Avoid:** Data not available  
**Polymerization:** Data not available

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Oral:** No information available  
**Inhalation:** No information available  
**Dermal:** No information available

**SECTION 12: ECOLOGICAL INFORMATION**

**Eco toxicity:** No information available  
**Mobility:** No information available  
**Biodegradation:** No information available



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

**Bioaccumulation:** No information available

### **SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose of in accordance with local regulations; offer surplus to a licensed disposal company if necessary.

### **SECTION 14: TRANSPORT INFORMATION**

**DOT (US):** Not dangerous goods

**IMDG:** Not dangerous goods

**IATA Proper Shipping Name:** Not classified as dangerous in the meaning of transport regulations

**IATA Hazard Class:** Not classified as hazardous for transport

### **SECTION 15: REGULATORY INFORMATION**

**US Federal Regulations:**

**SARA 302 Components:**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/12 Hazards**

No SARA Hazards

### **SECTION 16: OTHER INFORMATION**

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**End of Material Safety Data Sheet**



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

## MSDS

**Revision Date: February 5<sup>th</sup>, 2024**

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

**Product Code:** M6300 Calcium Chloride solution  
**Trade Name:** MiniOne® Let it Glow Bacterial Transformation MiniLab  
**Chemical Name:** Calcium Chloride solution  
**Synonym:** Calcium Chloride aqueous solution, liquid Calcium Chloride  
**Company Identification:** Embi Tec or The MiniOne Systems  
7738 Arjons Drive  
San Diego, CA 92126  
USA  
858-684-3190

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

This experimental lab kit includes the following chemical(s) listed below & various plastic accessories.

Formula :  $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$   
Molecular weight: 147.01 g/mol

Component	CAS-No.	Concentration
Calcium chloride dihydrate	10035-04-8	200 mM

### SECTION 3: HAZARDS IDENTIFICATION

**Emergency Overview:** May cause sensitization by skin contact. An eye irritant.

**Potential Health Effects:**

**Eyes** Direct contact can cause eye irritation including redness, tearing & pain.  
**Skin** May cause mild irritation in susceptible persons  
**Ingestion** May cause gastrointestinal irritation, nausea & discomfort

### SECTION 4: FIRST AID MEASURES

**Description of first aid measures:**

**Skin contact:** Wash off immediately with plenty of water  
**Eye contact:** Rinse immediately with plenty of water as a precaution, also under the eyelids  
**Ingestion:** Get medical attention immediately; never give anything by mouth to an unconscious person; rinse mouth with water  
**Inhalation:** Move to fresh air  
**Notes To physician:** Treat symptomatically



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

## **SECTION 5: FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Special hazards arising from substance/mixture:** No data available

**Special Protective Equipment for Firefighters:** Wear self-contained breathing apparatus and protective suit.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Use personal protective equipment

**Methods for Cleaning Up:** Soak up with inert absorbent material, if needed

## **SECTION 7: HANDLING AND STORAGE**

**Handling:** Avoid contact with eyes, skin, and clothing. Do not swallow. Wash thoroughly after handling.

**Storage:** Keep in properly labeled containers. Stored at < 4 °C (recommended).

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control Parameters:** Contains no substance with occupational exposure limit values.

**Exposure Limit Values:** None established

**Exposure Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls as needed

**Respiratory Protection:** Not required. If prefer, use an approved air-purifying respirator.

**Eye/Face Protection:** Use safety glasses or chemical goggles

**Skin/Hand Protection:** Use chemical gloves as needed. Wear lightweight protective clothing

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice

**Environmental Exposure**

**Controls:** Prevent product from entering drains

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Colorless liquid

**Odor:** Odorless

**Flash Point:** Data not available

**Viscosity:** Data not available

**Solubility:** Data not available

**Density:** Data not available

**Boiling Point:** Data not available

**Melting Point:** Data not available

**pH:** Data not available

## **SECTION 10: STABILITY AND REACTIVITY**

**Reactivity:** Data not available

**Stability:** Stable under recommended storage conditions

**Materials to Avoid:** Data not available

**Polymerization:** Data not available



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

**Oral :** No information available  
**Inhalation:** No information available  
**Dermal:** No information available

#### **SECTION 12: ECOLOGICAL INFORMATION**

**Eco toxicity:** No information available  
**Mobility:** No information available  
**Biodegradation:** No information available  
**Bioaccumulation:** No information available

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose of in accordance with local regulations; offer surplus to a licensed disposal company if necessary.

#### **SECTION 14: TRANSPORT INFORMATION**

**DOT (US):** Not dangerous goods  
**IMDG:** Not dangerous goods  
**IATA Proper Shipping Name:** Not classified as dangerous in the meaning of transport regulations  
**IATA Hazard Class:** Not classified as hazardous for transport

#### **SECTION 15: REGULATORY INFORMATION**

**US Federal Regulations:**

**SARA 302 Components:**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### **SECTION 16: OTHER INFORMATION**

This product is sold for educational purposes only. It is not intended for research, food, drug, household, agricultural, or cosmetic use. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may be present unknown hazards and should be used with caution. Since Embi Tec and The MiniOne Systems cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

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**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

End of Material Safety Data Sheet



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

## MSDS

**Revision Date: February 5<sup>th</sup>, 2024**

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

**Product Code:** M6300 Ampicillin solution  
**Trade Name:** MiniOne® Let it Glow Bacterial Transformation MiniLab  
**Chemical Name:** Ampicillin solution  
**Synonym:** Ampicillin aqueous solution  
**Company Identification:** Embi Tec or The MiniOne Systems  
7738 Arjons Drive  
San Diego, CA 92126  
USA  
858-684-3190

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

This experimental lab kit includes the following chemical(s) listed below & various plastic accessories.

Formula :  $C_{16}H_{19}N_3O_4S$   
Molecular weight: 349.41 g/mol

Component	CAS-No.	Concentration
Ampicillin	69-53-4	(100X) ~10 mg/mL

### SECTION 3: HAZARDS IDENTIFICATION

**Emergency Overview:** May cause sensitization by skin contact. An eye irritant.

**Potential Health Effects:**

**Eyes** Direct contact can cause eye irritation including redness, tearing & pain.  
**Skin** May cause mild irritation in susceptible persons  
**Ingestion** May cause gastrointestinal irritation, nausea & discomfort

### SECTION 4: FIRST AID MEASURES

**Description of first aid measures:**

**Skin contact:** Wash off immediately with plenty of water  
**Eye contact:** Rinse immediately with plenty of water as a precaution, also under the eyelids  
**Ingestion:** Get medical attention immediately; never give anything by mouth to an unconscious person; rinse mouth with water  
**Inhalation:** Move to fresh air  
**Notes To physician:** Treat symptomatically



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

## **SECTION 5: FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:** Water Foam Carbon dioxide (CO<sub>2</sub>) dry powder

**Special Hazards Arising from Substance/Mixture:** Carbon oxides, nitrogen oxides, sulfur oxides.

**Special Protective Equipment for Firefighters:** Wear self-contained breathing apparatus and protective suit.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Use personal protective equipment

**Methods for Cleaning Up:** Soak up with inert absorbent material, if needed. Dispose of properly.

## **SECTION 7: HANDLING AND STORAGE**

**Handling:** Avoid contact with eyes, skin, and clothing. Do not swallow. Wash thoroughly after handling.

**Storage:** Keep in properly labeled containers. Stored at < 4 °C (recommended).

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control Parameters:** Contains no substance with occupational exposure limit values.

**Exposure Limit Values:** None established

**Exposure Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls as needed.

**Respiratory Protection:** Not required. If prefer, use an approved air-purifying respirator.

**Eye/Face Protection:** Use safety glasses or chemical goggles.

**Skin/Hand Protection:** Use chemical gloves as needed. Wear lightweight protective clothing.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.

**Environmental Exposure Controls:** Prevent product from entering drains

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Colorless liquid

**Odor:** Odorless

**Flash Point:** Data not available

**Viscosity:** Data not available

**Solubility:** Data not available

**Density:** Data not available

**Boiling Point:** Data not available

**Melting Point:** Data not available

**pH:** Data not available

## **SECTION 10: STABILITY AND REACTIVITY**

**Reactivity:** Data not available

**Stability:** Stable under recommended storage conditions

**Materials to Avoid:** Oxidizing agents

**Polymerization:** Data not available



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Oral:** No information available  
**Inhalation:** No information available  
**Dermal:** No information available

**SECTION 12: ECOLOGICAL INFORMATION**

**Eco toxicity:** No information available  
**Mobility:** No information available  
**Biodegradation:** No information available  
**Bioaccumulation:** No information available

**SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose of in accordance with local regulations; offer surplus to a licensed disposal company if necessary.

**SECTION 14: TRANSPORT INFORMATION**

**DOT (US):** Not dangerous goods  
**IMDG:** Not dangerous goods  
**IATA Proper Shipping Name:** Not classified as dangerous in the meaning of transport regulations  
**IATA Hazard Class:** Not classified as hazardous for transport

**SECTION 15: REGULATORY INFORMATION**

**US Federal Regulations:**

**SARA 302 Components:**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/12 Hazards**

Acute Health Hazard, Chronic Health Hazard

**SECTION 16: OTHER INFORMATION**

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## MSDS

**Revision Date: February 5<sup>th</sup>, 2024**

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

**Product Code:** M6300 Lactose solution  
**Trade Name:** MiniOne® Let it Glow Bacterial Transformation MiniLab  
**Chemical Name:** Lactose solution  
**Synonym:** Lactose aqueous solution  
**Company Identification:** Embi Tec or The MiniOne Systems  
7738 Arjons Drive  
San Diego, CA 92126  
USA  
858-684-3190

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

This experimental lab kit includes the following chemical(s) listed below & various plastic accessories.

Formula:  $C_{12}H_{22}O_{11} \cdot H_2O$   
Molecular weight: 360.32 g/mol

Component	CAS-No.	Concentration
Lactose	10039-26-6	15% (w/v)

### SECTION 3: HAZARDS IDENTIFICATION

**Emergency Overview:** May cause sensitization by skin contact. An eye irritant.

**Potential Health Effects:**

**Eyes** Direct contact can cause eye irritation including redness, tearing & pain.  
**Skin** May cause mild irritation in susceptible persons  
**Ingestion** May cause gastrointestinal irritation, nausea & discomfort

### SECTION 4: FIRST AID MEASURES

**Description of first aid measures:**

**Skin contact:** Wash off immediately with plenty of water  
**Eye contact:** Rinse immediately with plenty of water as a precaution, also under the eyelids  
**Ingestion:** Get medical attention immediately; never give anything by mouth to an unconscious person; rinse mouth with water  
**Inhalation:** Move to fresh air  
**Notes To physician:** Treat symptomatically



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

## **SECTION 5: FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

**Special Hazards Arising from Substance/Mixture:** Carbon oxides

**Special Protective Equipment for Firefighters:** Wear self-contained breathing apparatus and protective suit.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Use personal protective equipment

**Methods for Cleaning Up:** Soak up with inert absorbent material, if needed. Dispose of properly.

## **SECTION 7: HANDLING AND STORAGE**

**Handling:** Avoid contact with eyes, skin, and clothing. Do not swallow. Wash thoroughly after handling.

**Storage:** Keep in properly labeled containers. Stored at 4 °C - 10 °C (recommended).

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control Parameters:** Contains no substance with occupational exposure limit values.

**Exposure Limit Values:** None established

**Exposure Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls as needed.

**Respiratory Protection:** Not required. If prefer, use an approved air-purifying respirator.

**Eye/Face Protection:** Use safety glasses or chemical goggles.

**Skin/Hand Protection:** Use chemical gloves as needed. Wear lightweight protective clothing.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.

**Environmental Exposure Controls:** Prevent product from entering drains

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Colorless liquid

**Odor:** Odorless

**Flash Point:** Data not available

**Viscosity:** Data not available

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**Melting Point:** Data not available

**pH:** Data not available

## **SECTION 10: STABILITY AND REACTIVITY**

**Reactivity:** Data not available

**Stability:** Stable under recommended storage conditions

**Materials to Avoid:** Data not available

**Polymerization:** Data not available



**Trade Name: MiniOne® Let it Glow Bacterial Transformation MiniLab**

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Oral:** No information available  
**Inhalation:** No information available  
**Dermal:** No information available

**SECTION 12: ECOLOGICAL INFORMATION**

**Eco toxicity:** No information available  
**Mobility:** No information available  
**Biodegradation:** No information available  
**Bioaccumulation:** No information available

**SECTION 13: DISPOSAL CONSIDERATIONS**

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**SECTION 15: REGULATORY INFORMATION**

**US Federal Regulations:**

**SARA 302 Components:**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/12 Hazards**

No SARA Hazards

**SECTION 16: OTHER INFORMATION**

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End of Material Safety Data Sheet