FAST. ACCURATE. EASY TO USE.

microdot®
Blood Glucose Monitoring System

OPERATIONS & QUALITY ASSURANCE
PROCEDURE MANUAL

For Healthcare Professionals

CAMBRIDGE SENSORS USA, LLC
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**microdot® BLOOD GLUCOSE METER OVERVIEW**

This section provides general information on the Microdot Blood Glucose Monitoring System

The Microdot Blood Glucose Monitoring System is a portable whole blood testing system which performs tests with quick and accurate results.

**It consists of three main parts:**

1. Microdot Blood Glucose Meter
2. Microdot Test Strips
3. Microdot High and Low Control Solution

These products have been designed, tested and proven to work together as a system to produce safe and accurate results.

Use only Microdot Test Strips and Control Solutions with the Microdot Glucose Meter.

**Your system includes:**
- Microdot Meter
- Anti-microbial Meter Cover
- Quality Assurance Manual
- Warranty Registration Card
- 3V Lithium Battery (installed)

**Additional components include:**
- Microdot Test Strips
- Microdot Control Solutions

---

**Troubleshooting the Meter**

- The blood glucose level is higher than 525 mg/dL.
- The blood glucose level is lower than 20 mg/dL.
- Error message that indicates that there is a problem with the meter, e.g., measurement error (time out, overflow, offset) or temperature out of range.
- Error message that indicates that there may be a problem with the test strip, e.g., the test strip may be damaged, moved, or removed during testing, or inserted improperly.
- Error message could be caused by a used or damaged test strip.
- Error message indicates serial communications error.
- Error message indicates very high blood sugar. You should recheck the blood glucose level. If “Hi” again, follow facility protocol.
- Error message indicates very low blood sugar. You should recheck the blood glucose level. If “Lo” again, follow facility protocol.
- Review the instructions and try again with a new test strip. If the problem persists, contact Customer Service.
- Check the test strip for damage and retest as necessary. Repeat the test. If the error message appears again, contact Customer Service.
- Repeat the test with a new strip. If the error message appears again, contact Customer Service.
- If error persists, contact Customer Service.

**Note:** Test results will be accurate but replace the battery as soon as possible. Battery type is CR2032 3 volt.
**SYSTEM COMPONENTS**

*microdot*® Blood Glucose Meter

**LCD Screen:** Shows blood glucose result and symbols that guide you through the test.

**Up/Down Toggle Buttons:** Scrolls the memory, sets time and date.

**Eject Button:** Releases test strip.

**Test Strip Port:** Insertion site for test strip.

**Serial Number:** Located in the upper left hand corner of the meter. Required when calling Customer Service for troubleshooting or meter replacement.

**Battery Compartment:** Holds one 3V Lithium battery (CR2032).

**Customer Service Number:** Located on the back of the meter. Call this number if you have any questions or problems with the Microdot Glucose Meter.

(877) 374-4062
SYSTEM COMPONENTS

microdot® Test Strip

The Microdot Blood Glucose Test Strip offers the latest advances in biosensor, auto-code technology. Blood is applied to the top edge of the Microdot Test Strip and is automatically drawn into the white channel where the reaction takes place. Only 600 nanoliters (0.6 microliters) is needed.

The Microdot Test Strip consists of the following parts:

Top Edge: Apply a drop of blood here, where the white channel meets the top of the edge strip.

White Channel: This is where you check if enough blood has been applied to the top edge.

Contact Bars: Insert this end of the test strip into the meter. Push firmly until the strip can go no further.
INITIAL SETUP OF THE microdot® METER

Before using the Microdot Meter for the first time, you should set the actual Time, Date and Year. The unit of measurement is preset and can not be changed.

Setting the Time, Date and Year

Enter the Set Mode.
To Enter the set mode, turn the meter on by pressing the C button. After the segment test, the time and date will start to flash.

Step 1
Set the Time and Date Format.
Pressing the C button again will now toggle between US and International Time and Date formats.

For US: 12h Time format, mm-dd (begins with AM setting). To accept the desired setting, press the M button.

Step 2
Set the Hour.
The Hour will start to flash. It can now be changed by pressing the C button. The US setting will begin at 12:01 AM and will move to PM. To accept the correct setting, press the M button.

Step 3
Set the Minutes.
The Minute will start to flash, it can now be changed by pressing the C button. To accept the correct setting, press the M button.

Repeat Steps 1 & 2 to set Month and Year.
INITIAL SETUP OF THE microdot® METER

Setting the Beeper

After setting the Time and Date, the Sound symbol will appear and can now be changed by pressing the C button. To accept the setting, press the M button.

This option is used to switch on or off the beeper. When turned ON, a sound will be heard when blood or control solution is applied to the strip and when the test is finished. The sound will be heard when an error has occurred or if an alarm is triggered.

When the M button is pressed to accept the beeper option, the meter will display END and switch off.
INITIAL SETUP OF THE *microdot*® METER

**Using Meter Memory**

Your Microdot Meter stores the 500 most recent blood glucose and control solution test results and insulin data with date and time in the memory. It also provides you with 14-day averages of your blood glucose test results. You can review the test results in memory with these easy steps.

**Step 1**

*Enter the Memory Mode.*

To Enter Memory Mode, turn on the meter by pressing the **M button**.

The meter will display the last result with Mem. symbol, time and date.

**Step 2**

*Recall Test Results.*

Previous results can be displayed by pressing the **C button**. As long as the **C button** is held, the meter will scroll through the memory displaying the result and the memory location. Once the button is released, the meter will display the selected result with its Time and Date. When the memory is full (500 results stored), the oldest result is dropped as the newest is added.

**NOTE:** When using the meter for the first time “Mem.---” will appear, showing that there are no test results stored in memory.
CONTROL SOLUTION TESTING

This chapter describes the necessary steps to test with the Microdot® Control Solutions in order to validate the performance of the MicrodotMeter and Microdot Strips.

When Should You Conduct a Control Solution Test?

- Any time you open a new vial of test strips.
- Whenever you think the system is not working properly.
- If the blood glucose test results differ from the resident’s symptoms or non-symptoms.
- If you believe the results are not accurate.
- If you drop the meter.
- If the vial of test strips has been left open for an extended period of time.

It is critical to follow the Operating Guidelines, on the right, to obtain accurate results while using the Microdot Glucose System.

Operating Guidelines:

- Use only Microdot Control Solutions (High and Low).
- Check the expiration date on the control solution vial. Do not use if expired or if the discard date has passed.
- Control solution, meter and test strips should come to room temperature before testing (66-77°F / 20-25°C).
- Use solution for three months after first opening. Record the discard date (opening date plus three months) on the control solution vial. Discard after three months.
- Close tightly and store the control solution at temperatures between 50-86°F (10-30°C).
- Do not refrigerate. Do not freeze.
Notes:
The control solution test is similar to a blood test except that you use Microdot® Control Solution instead of a drop of blood. The control solution ranges printed on the test strip vial are for Microdot Control Solutions only. It is used to check the meter and test strip performance. It is NOT a recommended range for your blood glucose level. When performing a control solution test it does not matter which solution you use first, the Low or High.

Control Solution Test Procedure:
1. Shake Low Control Solution bottle well before using.
2. Remove cap and discard the first drop of Control Solution and wipe off the dispenser tip to ensure a good sample and an accurate result.
3. Insert a test strip into the Microdot meter. Be sure the black contact bars go into the meter. Push the strip in firmly. Be sure it can go no further.
4. Invert bottle and squeeze out one drop of control solution. Apply the drop to the strip by bringing the meter and the strip to the drop. Touch the drop with the top edge of the test strip and wait until the test pad fills with the solution. Results appear in 10 seconds.
CONTROL SOLUTION TESTING

5. Compare the results with the ranges of expected results shown on the test strip vial. (Low = Blue Cap, High = Red Cap)

6. You should obtain results within the expected range printed on the test strip vial. If this is not so, repeat the test.

If the results are out of the range printed on the test strip vial, check the following:

- Was the vial at room temperature?
- Did you shake the bottle of control solution before using?
- Has the control solution expiration or discard date expired?
- Is the meter malfunctioning?

7. Repeat steps 1-6 for the High Control Solution procedure.

If the test result is still out of range, call your Microdot® Customer Service Representative at:

Toll Free (877) 374-4062

DO NOT test blood until you obtain control results within the expected ranges.
This section describes the procedure to test patient blood samples using the Microdot® Blood Glucose System.

### Operating Guidelines

- Before attempting to test with real blood, make sure you have performed control solution tests correctly to ensure the meter and test strips are performing properly and to verify technique.

- Use the test strips before their expiration date and within three months after opening.

- Do not use test strips that are wet, bent, scratched or damaged. Use each test strip immediately after removing it from the vial.

### Patient Test Procedure:

<table>
<thead>
<tr>
<th>What You Do</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press the <strong>C button</strong> to turn the meter on and/or insert test strip by pushing the two contact bars in firmly.</td>
<td>To verify all display symbols are working, all symbols should appear at the same time. If any of the symbols are missing or do not display completely, contact <strong>Cambridge Sensors USA</strong> at <strong>(877) 374-4062</strong></td>
</tr>
<tr>
<td>2. Obtain a drop of blood.</td>
<td>Using a safety lancet, lance the side of the finger to obtain a rounded blood sample. Avoid squeezing the puncture site excessively.</td>
</tr>
</tbody>
</table>
# TESTING WITH PATIENTS

<table>
<thead>
<tr>
<th>What You Do</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3.</strong> Apply sample.</td>
<td>The blood drop symbol will flash alternately to indicate the meter has detected that a test strip has been inserted and is ready for the blood sample to be added. Apply the drop of blood directly to the edge of the test strip, and allow the sample to wick automatically into the test zone. If you do not apply a blood sample within one minute, the meter will turn itself off. Either reinsert the test strip or press the <strong>M button</strong> to turn the meter back on.</td>
</tr>
<tr>
<td><img src="image" alt="OK" /></td>
<td><img src="image" alt="NOT OK" /></td>
</tr>
</tbody>
</table>

| **4.** Results in 10 seconds. | After an adequate blood sample has been applied to the test strip, the Microdot® Xtra Meter will display three running dashes, which indicates the meter is performing the test. After 10 seconds, the test result will display. |
| ![108 mg/dL](image) | |

| **5.** Dispose of lancet. | Dispose of used lancet in an approved sharps container. |

| **6.** Dispose of test strip. | Simply press the eject button on the meter to dispose of used test strip. |

Note: If the blood test result is lower than 20 mg/dL, “Lo” will appear on the meter display. This indicates severe hypoglycemia (low blood glucose). You should immediately treat your hypoglycemia as recommended by your physician's protocol. If the blood test result is higher than 525 mg/dL, “Hi” will appear on the meter display. This indicates severe hyperglycemia (high blood glucose). You should immediately treat your hyperglycemia as recommended by your physician's protocol.
IN-SERVICE TRAINING OUTCOMES

Once your Microdot® Meter in-service is complete, Health Care Professionals should be able to:

1. Locate and explain the following components of the Microdot Meter:
   - Eject Button
   - Test Strip Port
   - Battery Compartment
   - Serial Number
   - Customer Service Number

2. Locate and explain the label information on the Microdot Test Strip Vial:
   - Discard Date
   - Lot Number
   - Expiration Date
   - Control Ranges
   - Storage Temperature Range

3. Set Time and Date of meter

4. Identify three parts of the Microdot Test Strips:
   - Top Edge
   - Test Pad
   - Contact Bars

5. Identify the following parts of the Microdot Control Solution Bottles:
   - Low vs. High
   - Discard Date
   - Lot Number
   - Expiration Date
   - Storage Temperature Range

6. Properly insert the Microdot Test Strip

7. Perform control solution tests

8. Document and maintain Microdot Quality Control Records

9. Obtain a blood sample

10. Perform a blood test

11. Identify meter result range

12. Access meter memory

13. Change the battery

14. Identify and resolve error readings

METER SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Size</td>
<td>0.6 Microliters (600 Nanoliters)</td>
</tr>
<tr>
<td>Total Test Time</td>
<td>10 Seconds</td>
</tr>
<tr>
<td>Sample Application</td>
<td>Strip is placed in the meter and sample wicks into strip</td>
</tr>
<tr>
<td>Hematocrit Range</td>
<td>30 - 50%</td>
</tr>
<tr>
<td>Measurement Range</td>
<td>20 to 525 mg/dL</td>
</tr>
<tr>
<td>Interference</td>
<td>No interference from over 20 interfering substances</td>
</tr>
<tr>
<td>Strip Removal</td>
<td>Strip ejection by push button</td>
</tr>
<tr>
<td>Coding</td>
<td>Auto-code</td>
</tr>
<tr>
<td>Accuracy of Strip/Meter System</td>
<td>At least +/- 20% relative to YSI in clinical trials</td>
</tr>
<tr>
<td>Precision of Strip</td>
<td>Correction Coefficient of Regression &gt; 0.969</td>
</tr>
<tr>
<td></td>
<td>The strip variation is not greater than 6.4%</td>
</tr>
<tr>
<td>Shelf Life of Meter</td>
<td>Approx. 5 years</td>
</tr>
<tr>
<td>Operating Humidity range</td>
<td>10 - 90%; storage 90% max (non-condensing)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>50˚ - 104˚F (10˚ - 40˚C)</td>
</tr>
<tr>
<td>Type of Glucose Result</td>
<td>Plasma equivalent</td>
</tr>
<tr>
<td>Strip Vial Packing Size</td>
<td>50 strips per vial</td>
</tr>
<tr>
<td>Typical Control Solution Ranges when used with Strips/Meter</td>
<td>Printed on vial label</td>
</tr>
<tr>
<td>Strip Shelf Life after Opening</td>
<td>3 months</td>
</tr>
<tr>
<td>Strip Vial</td>
<td>Plastic with desiccant sleeve vial</td>
</tr>
<tr>
<td>Altitude</td>
<td>To 10,000 ft (Target)</td>
</tr>
<tr>
<td>Module Size</td>
<td>65 mm x 85 mm x 16 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>Approx. 60 grams / 2 ounces</td>
</tr>
<tr>
<td>Battery Life</td>
<td>1,500 tests or about 1 year at three tests per day</td>
</tr>
<tr>
<td>Glucose Units</td>
<td>mg/dL or mmol/L</td>
</tr>
<tr>
<td>Memory</td>
<td>Total of 500 glucose results and insulin-input data</td>
</tr>
<tr>
<td>Power Source</td>
<td>One replaceable 3V lithium battery (CR2032 or equivalent)</td>
</tr>
<tr>
<td>Automatic Shut-off</td>
<td>One minute after last user action</td>
</tr>
<tr>
<td>Warranty</td>
<td>1 Year Manufacturer Warranty</td>
</tr>
</tbody>
</table>
IN-SERVICE TRAINING OUTCOMES

Once your Microdot® Meter in-service is complete, Health Care Professionals should be able to:

1. Locate and explain the following components of the Microdot Meter:
   - Eject Button
   - Test Strip Port
   - Battery Compartment
   - Serial Number
   - Customer Service Number

2. Locate and explain the label information on the Microdot Test Strip Vial:
   - Discard Date
   - Lot Number
   - Expiration Date
   - Control Ranges
   - Storage Temperature Range

3. Set Time and Date of meter

4. Identify three parts of the Microdot Test Strips
   - Top Edge
   - Test Pad
   - Contact Bars

5. Identify the following parts of the Microdot Control Solution Bottles:
   - Low vs. High
   - Discard Date
   - Lot Number
   - Expiration Date
   - Storage Temperature Range

6. Properly insert the Microdot Test Strip

7. Perform control solution tests

8. Document and maintain Microdot Quality Control Records

9. Obtain a blood sample

10. Perform a blood test

11. Identify meter result range

12. Access meter memory

13. Change the battery

14. Identify and resolve error readings
3. **Apply sample.**

4. Results in 10 seconds.

5. **Dispose of lancet.**

The blood drop symbol will flash alternately to indicate the meter has detected that a test strip has been inserted and is ready for the blood sample to be added.

Apply the drop of blood directly to the edge of the test strip, and allow the sample to wick automatically into the test zone.

If you do not apply a blood sample within one minute, the meter will turn itself off. Either reinsert the test strip or press the **M button** to turn the meter back on.

After an adequate blood sample has been applied to the test strip, the Microdot® Xtra Meter will display three running dashes, which indicates the meter is performing the test. After 10 seconds, the test result will display.

Dispose of used lancet in an approved sharps container.

6. **Dispose of test strip.**

Simply press the eject button on the meter to dispose of used test strip.

**Note:** If the blood test result is lower than 20 mg/dL, "Lo" will appear on the meter display. This indicates severe hypoglycemia (low blood glucose). You should immediately treat your hypoglycemia as recommended by your physician’s protocol.

If the blood test result is higher than 525 mg/dL, "Hi" will appear on the meter display. This indicates severe hyperglycemia (high blood glucose). You should immediately treat your hyperglycemia as recommended by your physician’s protocol.
This section describes the procedure to test patient blood samples using the Microdot® Blood Glucose System.

Operating Guidelines

Before attempting to test with real blood, make sure you have performed control solution tests correctly to ensure the meter and test strips are performing properly and to verify technique.

Use the test strips before their expiration date and within three months after opening. Do not use test strips that are wet, bent, scratched or damaged. Use each test strip immediately after removing it from the vial.

Patient Test Procedure:

**What You Do**

**Notes**

1. Press the **C** button to turn the meter on and/or insert test strip by pushing the two contact bars in firmly.

   To verify all display symbols are working, all symbols should appear at the same time. If any of the symbols are missing or do not display completely, contact Cambridge Sensors USA at (877) 374-4062.

2. Obtain a drop of blood.

   Using a safety lancet, lance the side of the finger to obtain a rounded blood sample. Avoid squeezing the puncture site excessively.

---

**microdot® BLOOD GLUCOSE MONITORING SYSTEM IN-SERVICE FORM**

The Health Care professionals listed below are trained and have demonstrated proficiency using the Microdot Blood Glucose Monitoring System.

---

Cambridge Sensors Representative/Qualified Trainer

<table>
<thead>
<tr>
<th>Date</th>
<th>Health Care Professional’s Name</th>
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</table>

*The chart is designed for use during the initial training on the Microdot Blood Glucose System by a Cambridge Sensors Representative, In-Service Video or Qualified Trainer.*
5. Compare the results with the ranges of expected results shown on the test strip vial. (Low = Blue Cap, High = Red Cap)

6. You should obtain results within the expected range printed on the test strip vial. If this is not so, repeat the test. If the results are out of the range printed on the test strip vial, check the following:

- Was the vial at room temperature?
- Did you shake the bottle of control solution before using?
- Has the control solution expiration or discard date expired?
- Is the meter malfunctioning?

7. Repeat steps 1-6 for the High Control Solution procedure.

If the test result is still out of range, call your Microdot® Customer Service Representative at:

Toll Free (877) 374-4062

DO NOT test blood until you obtain control results within the expected ranges.

---

Cambridge Sensors USA, LLC

---

Cambridge Sensors Representative

Cambridge Sensors Representative Signature

Date
I. Microdot Meter - Locate the following:
   a. Battery
   b. Serial Number
   c. Toll Free Customer Service Number
   d. Eject Button

II. Identify and explain the following:
   a. Blood Test Procedure
   b. Control Solution Procedure
   c. Troubleshooting

III. Explain proper procedure for:
   a. Dating of Microdot Xtra Test Strips and Control Solution
   b. When to perform a Control Test
   c. Handling Control Solution results that are out of range

IV. Perform and explain the following procedures:
   a. Control Solution testing
   b. Blood testing
   c. Recalling test results
   d. Changing the battery

If all tasks were not properly completed, have the operator repeat the procedure correctly. When all tasks have been properly completed, sign bottom of this form and fill out the proper Qualified Trainer or In-service form.

Cambridge Sensors USA Sales Rep. ___________________________ Date ____________

Qualified Trainer ___________________________ Date ____________

Operator ___________________________ Date ____________
This chapter describes the necessary steps to test with the Microdot® Control Solutions in order to validate the performance of the MicrodotMeter and Microdot Strips.

When Should You Conduct a Control Solution Test?
- Any time you open a new vial of test strips.
- Whenever you think the system is not working properly.
- If the blood glucose test results differ from the resident's symptoms or non-symptoms.
- If you believe the results are not accurate.
- If you drop the meter.
- If the vial of test strips has been left open for an extended period of time.

It is critical to follow the Operating Guidelines, on the right, to obtain accurate results while using the Microdot Glucose System.

**Operating Guidelines:**
- Use only Microdot Control Solutions (High and Low).
- Check the expiration date on the control solution vial. Do not use if expired or if the discard date has passed.
- Control solution, meter and test strips should come to room temperature before testing (66-77˚F / 20-25˚C).
- Use solution for three months after first opening. Record the discard date (opening date plus three months) on the control solution vial. Discard after three months.
- Close tightly and store the control solution at temperatures between 50-86˚F (10-30˚C).
- Do not refrigerate. Do not freeze.

---

**Microdot Meter Serial Number**

**Month/Year**

<table>
<thead>
<tr>
<th>Date</th>
<th>Station/Initials</th>
<th>Test Strip Lot #</th>
<th>Low Control Range (mg./dl.)</th>
<th>Low Control Result (mg./dl.)</th>
<th>High Control Range (mg./dl.)</th>
<th>High Control Result (mg./dl.)</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Section I - Identification

Trade Name: Microdot Blood Glucose Test Strips

Common Name: Blood glucose test strips for use with Microdot Blood Glucose Test System

Supplier: Cambridge Sensors USA
10051 Bode Rd.
Palinfield, IL  60585

Emergency Phone Number: (877) 374-4062

Section II - Composition

This product does not present a physical or health hazard under reasonable use or under emergency situations involving a release of only this product. This material is therefore not considered to be a “Hazardous Chemical” as defined by the Federal Occupational Safety and Health Administration in the Hazard Communication Standard (29 CFR 1910.1200) or the equivalent standards generated by state agencies.

ACCORDINGLY NO MATERIAL SAFETY DATA SHEET IS REQUIRED FOR THIS PRODUCT.

MSDSs that represent non-hazardous chemicals are not covered by the HCS. Paragraph 29 CFR 1910.1200 (g) (8) of the standard requires that “the employer shall maintain in the workplace copies of the required MSDSs for each hazardous chemical, and shall ensure that they are readily accessible during each work shift to employees when that are in their work area(s)” OSHA does not require or encourage employers to maintain MSDSs for non-hazardous chemicals. Consequently, an employer is free to discard MSDSs for non-hazardous chemicals.
INITIAL SETUP OF THE METER

Setting the Beeper

After setting the Time and Date, the Sound symbol will appear and can now be changed by pressing the C button. To accept the setting, press the M button.

This option is used to switch on or off the beeper. When turned ON, a sound will be heard when blood or control solution is applied to the strip and when the test is finished. The sound will be heard when an error has occurred or if an alarm is triggered.

When the M button is pressed to accept the beeper option, the meter will display END and switch off.
MATERIAL SAFETY DATA SHEET

Microdot® Control Solutions

Section V - Fire Fighting Measures

Auto-flammability: Not determined
Flash Point (test method): Not determined
Extinguishing Media:
- Use fire extinguishing media appropriate for site collections.
Special Fire Fighting Procedures:
- Structural fire fighting gear and self-contained breathing apparatus will provide adequate protection if this product is in a fire area.
Fire and Explosion Hazards: Not determined
Hazardous Combustion Products:
- Thermal decomposition may emit carbon monoxide and carbon dioxide.
Upper Explosion Limit (%): Not determined
Lower Explosion Limit (%): Not determined

Section VI - Accidental Release Measures

Spill and Leak Procedures:
- Use an absorbent material to contain/pick up the spilled solution. Place all contaminated disposals into a suitable container, seal, label and hold for disposal.

Section VII - Handling and Storage

Storage Temperature:
- Store vials as directed in the package insert.
Handling/Storage:
- Handle and store vials as directed by the package insert.
Ventilation Requirements:
- No special requirements.
Sensitivity to Static Electricity:
- Not known
Sensitivity to Mechanical Impact:
- Not known

Section VIII - Exposure Controls / Personal Protection

Respiratory Protection:
- Not required under normal use of this product.
Ventilation:
- Not required under normal use of this product.
Protective Gloves:
- Wear appropriate gloves to prevent skin contact. Replace torn or punctured gloves promptly.
Other Protective Equipment:
- Wear appropriate eye protection to prevent eye contact.
Other Engineering Controls:
- Wear appropriate body protection to prevent skin contact.
Work Practices:
- Eye wash stations and deluge showers.
- Good laboratory technique should be used when handling this product. Observe appropriate chemical hygiene.
- Do not place in mouth.
Hygienic Practices:
- Do not eat, drink or smoke while working with this product.
- Upon completion of work activities involving this product, wash hands thoroughly with soap and water.
**Section IX - Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure Substance or preparation</td>
<td>Preparation Physical Form Liquid</td>
</tr>
<tr>
<td>Appearance/Odor</td>
<td>Blue, odorless pH AS is neutral</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting/Freezing</td>
<td>Not determined</td>
</tr>
<tr>
<td>Partition</td>
<td>Not determined</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor Pressure (mmHg)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor Density (air =1)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not determined</td>
</tr>
<tr>
<td>Volatiles</td>
<td>Not determined</td>
</tr>
<tr>
<td>Volatile Organic Compounds</td>
<td>Not determined</td>
</tr>
<tr>
<td>Auto-flammability</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
</tr>
<tr>
<td>Stability</td>
<td>Stable</td>
</tr>
<tr>
<td>Materials to Avoid</td>
<td>Strong bases, strong acids and water reactive materials</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>Thermal decomposition may emit carbon monoxide and carbon dioxide.</td>
</tr>
</tbody>
</table>

**Section X - Toxicological Information**

| Route of Entry                        | Ingestion, skin and/or eye contact                         |
| Effects of Chronic Exposure           | Not known                                                 |
| Effects of Acute Exposure             | Not known                                                 |
| Special Health Effects                | Not known                                                 |
| Target Organs                         | Not known                                                 |

**Section XI - Ecological Information**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Effect on Environment</td>
<td>Not known</td>
</tr>
<tr>
<td>Potential to Bioaccumulate</td>
<td>Not known</td>
</tr>
<tr>
<td>Mobility</td>
<td>Not known</td>
</tr>
<tr>
<td>Ecotoxicity</td>
<td>Not known</td>
</tr>
<tr>
<td>Persistence and Degradeability</td>
<td>Not known</td>
</tr>
<tr>
<td>Aqua Toxicity</td>
<td>Not known</td>
</tr>
</tbody>
</table>

**Section XII - Disposal Considerations**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Disposal</td>
<td>Please consult local, state and federal regulations for additional guidance on disposal.</td>
</tr>
<tr>
<td>Empty Container Warnings</td>
<td>Not known</td>
</tr>
</tbody>
</table>
MATERIAL SAFETY DATA SHEET

Section XII - Transport Information (See also Section IX)

<table>
<thead>
<tr>
<th>ADR / RID</th>
<th>Not known</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEFIC Tremcard</td>
<td>Not known</td>
</tr>
<tr>
<td>Hazchem Code</td>
<td>Not known</td>
</tr>
<tr>
<td>Kemmler Code</td>
<td>Not known</td>
</tr>
<tr>
<td>IMDG Classification</td>
<td>Not known</td>
</tr>
<tr>
<td>IATA Classification</td>
<td>Not known</td>
</tr>
<tr>
<td>Marine Pollutant</td>
<td>Not known</td>
</tr>
<tr>
<td>UN Number</td>
<td>Not known</td>
</tr>
<tr>
<td>UN Class</td>
<td>Not known</td>
</tr>
<tr>
<td>UN Packing Group</td>
<td>Not known</td>
</tr>
</tbody>
</table>

Section XIV - Regulatory Information

<table>
<thead>
<tr>
<th>EEC Hazard Classification</th>
<th>Not known</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Phrases</td>
<td>Not known</td>
</tr>
<tr>
<td>Safety Phrases</td>
<td>Not known</td>
</tr>
</tbody>
</table>

Section XV - Other Information

Directives 88/379/EEC and 91/155/EEC have been considered when compiling this MSDS; the information is provided for health and safety assessment by an industrial user. Reference should be made to any relevant local or national health, safety or environmental legislation. This information does not constitute indication of suitability for specific uses. The information, data, and recommendations contained herein are based upon information believed by Cambridge Sensors USA, after reasonable investigation and research, to be accurate. However, Cambridge Sensors USA does not warrant the accuracy of this information. All materials and mixtures may present unknown hazards and should be used with caution. When necessary or appropriate, independent opinions regarding the risk of handling or exposure should be obtained from trained professionals. Cambridge Sensors USA disclaims any warranty against patent infringement and the implied warranties of merchantability and fitness for a particular purpose. Customer’s sole and exclusive remedy shall be replacement of the product or return of the product and refund of the purchase price, at Cambridge Sensors USA option. In no case can Cambridge Sensors USA be liable for incidental or consequential damages, including lost profits.
**BLOOD GLUCOSE METER OVERVIEW**

This section provides general information on the Microdot Blood Glucose Monitoring System. The Microdot Blood Glucose Monitoring System is a portable whole blood testing system which performs tests with quick and accurate results.

It consists of three main parts:

1. **Microdot Blood Glucose Meter**
2. **Microdot Test Strips**
3. **Microdot High and Low Control Solution**

These products have been designed, tested and proven to work together as a system to produce safe and accurate results.

Use only Microdot Test Strips and Control Solutions with the Microdot Glucose Meter.

Your system includes:

- **Microdot Meter**
- **Anti-microbial Meter Cover**
- **Quality Assurance Manual**
- **Warranty Registration Card**
- **3V Lithium Battery (installed)**

Additional components include:

- **Microdot Test Strips**
- **Microdot Control Solutions**

**Troubleshooting the microdot® Meter**

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hi</strong></td>
<td>The blood glucose level is higher than 525 mg/dL. This message indicates very high blood sugar. You should recheck the blood glucose level. If “Hi” again, follow facility protocol.</td>
</tr>
<tr>
<td><strong>Lo</strong></td>
<td>The blood glucose level is lower than 20 mg/dL. This message indicates very low blood sugar. You should recheck the blood glucose level. If “Lo” again, follow facility protocol.</td>
</tr>
<tr>
<td><strong>E-1</strong></td>
<td>Error message that indicates that there is a problem with the meter, e.g., measurement error (time out, overflow, offset) or temperature out of range. Review the instructions and try again with a new test strip. If the problem persists, contact Customer Service.</td>
</tr>
<tr>
<td><strong>E-2</strong></td>
<td>Error message that indicates that there may be a problem with the test strip, e.g., the test strip may be damaged, moved, or removed during testing, or inserted improperly. Check the test strip for damage and retest as necessary. Repeat the test. If the error message appears again, contact Customer Service.</td>
</tr>
<tr>
<td><strong>E-3</strong></td>
<td>Error message could be caused by a used or damaged test strip. If error persists, contact Customer Service.</td>
</tr>
<tr>
<td><strong>E-5</strong></td>
<td>Error message indicates serial communications error. If error persists, contact Customer Service.</td>
</tr>
<tr>
<td><strong>E-6</strong></td>
<td>The battery sign appears on the display with the unit of measurement. The power of the battery is getting low. You can complete about 50 more tests from the time this symbol first appears. Test results will be accurate but replace the battery as soon as possible. Battery type is CR2032 3 volt.</td>
</tr>
</tbody>
</table>