

Blood Glucose and Uric Acid Meter **User Manual**

Safe AQ UG

Safe AQ UG

**Blutzucker und Harnsäure Benutzerhandbuch**

## **Blood Glucose and Uric Acid Monitoring System User Manual Safe AQ UG**

### **Dear Owner:**

Sinocare thanks you for choosing the Safe AQ UG blood glucose and uric acid monitoring system. This user manual contains important information about the meter and how it works.

Please read this user manual carefully before using your new meter, or the protection provided by the meter may be impaired.

If you have any questions, please feel free to contact our Customer Service at +86-731-89935581/+86-731-89935582 or your local dealers.

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## **Safe AQ UG Blood Glucose and Uric Acid Monitoring System**

### **Introduction to the Your Blood Glucose and Uric Acid Monitoring System**

#### **Intended Use**

The Safe AQ UG Blood Glucose and Uric Acid Monitoring System is designed for the quantitative measurement of glucose and uric acid in fresh capillary whole blood samples and in venous whole blood samples. The Safe AQ UG Blood Glucose and Uric Acid Monitoring System is for use outside the body only (in vitro diagnostic use) for self-testing and professional use as an aid in the management of diabetes and hyperuricemia (HUA).

The Safe AQ UG Blood Glucose and Uric Acid Monitoring System is intended for in vitro diagnostic use and should not be used for the diagnosis of or screening of diabetes and hyperuricemia (HUA).

The Safe AQ UG Blood Glucose and Uric Acid Monitoring System includes:

Safe AQ UG blood glucose and uric acid meter, Safe AQ UG blood glucose test strip, Safe AQ UG uric acid test strip, blood glucose control solution, uric acid control solution

Unit type: Safe AQ UG Blood Glucose and Uric Acid meter displays blood glucose results in mg/dL or mmol/L and uric acid results in mg/dL or  $\mu\text{mol/L}$ .

#### **Test Principle**

A blood glucose test or uric acid test is based on measurement of electrical current caused by the reaction of glucose or uric acid with the reagents (special chemicals) on the electrode of the strip. The blood or control solution sample is drawn into the tip of the test strip through capillary action. Glucose or uric acid in the sample reacts with the special chemicals and generates electrons, which produce electrical current. The meter measures the electrical current and calculates the glucose or uric acid result. The blood glucose results are displayed in mg/dL or mmol/L and uric acid results are displayed in mg/dL or  $\mu\text{mol/L}$ .



## Important Safety Information

- ▶ For self-testing customer, your Safe AQ UG meter and lancing device are for single person use only. Do not share them with anyone else, even family members.
- ▶ For professional use, if the meter is being used on the second person, the meter and lancing device should be disinfected first.
- ▶ Safe AQ UG test strip and lancet are for single use only. DO NOT REUSE.
- ▶ Do not use other test strips and control solutions with the Safe AQ UG meter.
- ▶ Do not use the meter if it is not working properly, or there is any damage.
- ▶ Keep the test strip vial away from children. The strip vial, test strips, and control solution bottles can be choking hazards. DO NOT drink the control solution.
- ▶ Remove the batteries if the meter is not likely to be used for some time.

**DO NOT CHANGE YOUR TREATMENT BASED ON A SINGLE RESULT THAT DOES NOT MATCH HOW YOU FEEL OR IF YOU BELIEVE THAT YOUR TEST RESULT COULD BE FALSE.**

## Patient Cautions

- ▶ Not for neonatal (newborn or infant) use
- ▶ Not for screening or diagnosis of diabetes mellitus.
- ▶ Not for use on the critical patients.
- ▶ For in vitro diagnostic use only.

## Important Health-Related Information

The American Diabetes Association (ADA) suggests the following targets for normal blood glucose range. More or less stringent goals may be appropriate for each person. If your test result is out of the range or your test result is not in accordance with your feeling, retest your blood glucose. If still out of the range, please contact healthcare professional.

Expected Results for people without diabetes:

	Plasma Blood Glucose Result
Fasting Plasma Glucose	<100 mg/dL (<5.55 mmol/L)

The Modern clinical laboratory diagnostics-test and clinical (May, 2009, version 2) suggests the reference value range for uric acid are as follow:

Male	202 $\mu\text{mol/L}$ ~ 416 $\mu\text{mol/L}$ (3.4 mg/dL ~ 7.0 mg/dL)
Female	142 $\mu\text{mol/L}$ ~ 339 $\mu\text{mol/L}$ (2.4 mg/dL ~ 5.7 mg/dL)

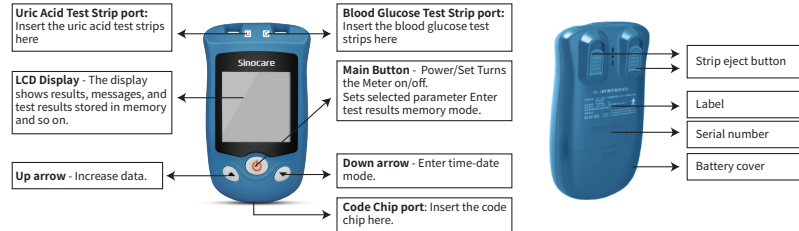
1. If blood glucose test results greater than 33.3mmol/L (600 mg/dL), the meter will display “HI”. Retest immediately with a new test strip. If your reading is still “HI”, contact healthcare professional immediately.
2. If blood glucose test results low than 1.1mmol/L(20mg/dL), the meter will display “LO”. Retest immediately with a new test strip. If your reading is still “LO”, contact healthcare professional immediately.
3. If uric acid test results greater than 1188  $\mu\text{mol/L}$  (20.0mg/dL), the meter will display “HI”. Retest immediately with a new test strip. If your reading is still “HI”, contact healthcare

professional immediately.

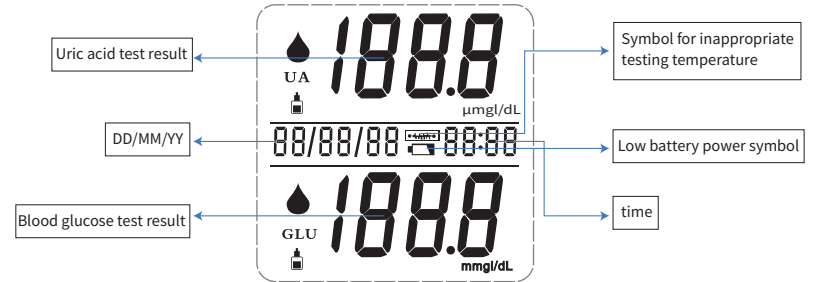
4. If uric acid test results low than 181  $\mu\text{mol/L}$  (3.0mg/dL), the meter will display “LO”. Retest immediately with a new test strip. If your reading is still “LO”, contact healthcare professional immediately.

Note: Do not change your treatment only based on test result and light indications. Please consult healthcare professional for your treatment.

## About Your Safe AQ UG Meter



## Full Screen Display



## Button Functions

Button	Function	Action
⏻	To turn the meter on and enter the blood glucose test result review mode.	Press and hold ⏻ for 3 seconds.
	To change sample type of test result review	Short press ⏻
	To turn the meter off.	Press and hold ⏻ for 3 seconds.
	To delete test results.	In test result review mode, press ⏻ and ▼ together to delete all kinds of test result .
	To confirm date/time settings.	Short press ⏻
▲	To increase the number of memory when review test result	Short press ▲.
	To adjust settings for date-time/ scroll through test results.	Press and release ▲.
▼	To decrease the number of memory when review test result.	Short press ▼.
	To adjust settings for date-time/ scroll through test results.	Press and release ▼.

## Setting Up Your Safe AQ UG Blood Glucose and Uric Acid meter

Setup steps for date/time

The Safe AQ UG blood glucose and uric acid meter is preset with the date and time. You may need to adjust it to your local time zone. Check the date and time each time the batteries are replaced. Reset the date and time if they are not correct.

### STEP 1: Insert the Batteries

Open the Battery Cover on the back side of the Safe AQ UG blood glucose and uric acid meter. Insert two AAA alkaline batteries as indicated by the “+” and “-” symbols.

### STEP 2: Set Correcting Code of Uric Acid (use code chip)

Code chip matching with test strips shall be used when you use a new vial of uric acid test strip. Find code chip in test strip package, check if the code number on code chip is in accordance with code number on test strip package. If not, you will get inaccurate test results, please call Customer Service at +86-731-89935581/+86-731-89935582. If there is already a code chip in Safe AQ UG meter, please take it out and insert a new code chip. Insert the code chip to code chip port, the meter will make a short beep sound and perform self-inspection. The meter will display code number and meter will be off after a short beep

sound.

If there is an error, the meter will display E-4. Please pull out the code chip and insert again. If still failed, please call Customer Service at +86-731-89935581/+86-731-89935582.

Every code chip only need to be inserted once, the meter will store the code number until insert new code chip.

### STEP 3: How to Set the Date and Time

1. With the meters off, press and hold ▼ for 3 seconds and the meter will turn on. The meter enters into the Date/Time mode.
2. It displays date and time, the segment of year flashes.

#### Step 1:

With the meter turned off, press and hold ▼ for 3 seconds to start Time and Date setting mode.



#### Step 2:

Date/Time Mode  
Flashing Year



### STEP 4: Setting the Year

The year appears flashing at the left side of the meter display.

1. Press and release ▼ or ▲ button to decrease or increase the year.
2. Short press and release the main button ⏻ to confirm the year.



#### Step 1:

Press and release ▼ or ▲ to decrease or increase the year.



#### Step 2:

Short press and release the main button ⏻ to confirm the year.

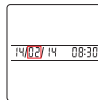


## STEP 5: Setting the Month

The month appears flashing at the left side of the meter display.

1. Setting the Month: Press and release ▼ or ▲ button to decrease or increase the month.

2. Short press and release the main button ⏻ to confirm the month.



### Step 1:

Press and release ▼ or ▲ to decrease or increase the month.



### Step 2:

Short press and release the main button ⏻ to confirm the month.

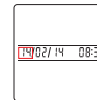


## STEP 6: Setting the Day

The day appears flashing at the left side of the meter display.

1. Press and release ▼ or ▲ button to decrease or increase the day.

2. Short press and release ⏻ to confirm the day.



### Step 1:

Press and release ▼ or ▲ to decrease or increase the day.



### Step 2:

Short press and release ⏻ to confirm the day.



## STEP 7: Setting the Hour

The hour appears flashing at the lower left side of the meter display.

1. Press and release ▼ or ▲ to decrease or increase the hour.
2. Short press and release ⏻ to confirm the hour.



### Step 1:

Press and release ▼ or ▲ to decrease or increase the hour.



### Step 2:

Short press and release ⏻ to confirm the hour.



## STEP 8: Setting the Minutes

The minutes appear flashing at the lower left side of meter display.

1. Press and release ▼ or ▲ to decrease or increase the minutes.
2. Short press and release ⏻ to confirm the minutes.
3. The meter will turn off automatically.



### Step 1:

Press and release ▼ or ▲ to decrease or increase the minutes.



### Step 2:

Short press and release ⏻ to confirm the minutes.



#### Note

- 24 digital clock-hour time format can be displayed, year can be set from 2000-2099.
- The meter may be preset with time and date. If you need to adjust time and date setting or replace the battery, you need to enter the Time- Date setting mode and reset the time and date.
- Continuous decrease and Increase function: When set up Date and Time, press and hold ▼ for more than 1 second, the value will continuous decrease; press and hold ▲ for more than 1 second, the value will continuous increase.
- Press and hold ⓪ button for more than 3 seconds to exit from Date and Time set -up mode.

## Control Solution Testing

### Why Perform a Control Solution Test

- Ensures that your meter and test strips are working properly.
- Allows you to practice testing without using blood.

### When Should You Perform a Control Solution Test

- When you begin using a new vial of Test Strips.
- When the vial cap is opened for a long time.
- When Test Strips have been exposed to extreme environmental conditions.
- When you want to check whether meter or test strips are work properly.
- When you drop or broken the meter.
- When you want to check whether the test steps are correct.

### Important Information

- Use only Sinocare control solution with your Meter.
- Check the expiration date on the control solution bottle. Do not use if expired.
- Use the blood glucose test strips within a period of 6 months from the date that you first open the vial.



- Use the uric acid test strips within a period of 3 months from the date that you first open the vial.
- Record the discard date on the blood glucose control solution bottle, which is 3 months from when you first open it. Discard the bottle after 3 months.
- Record the discard date on the uric acid control solution bottle, which is 2 months from when you first open it. Discard the bottle after 2 months.
- Discard any bottle that appears to be cracked or leaking.
- For in vitro diagnostic use only.




#### Performing a control solution test


Start with the meter off.

##### **STEP 1:** Wash your Hands

Wash your hands with mild soap and water. Be sure to dry your hands before performing a test.

##### **STEP 2:** Insert a Safe AQ UG Test Strip

Insert a Safe AQ UG Test Strip with printing face up and the contact end into the test strip port until it cannot go any further. The meter will turn on. If insert the blood glucose test strip, the meter will display  and  symbol is flashing. If insert a Safe AQ UG uric acid test strip, the meter will display the correcting code and  symbol is flashing.

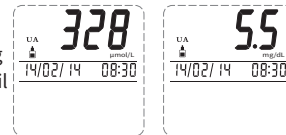
**Attention:** Only when meter display flashing blood drop symbol “ ” and control bottle

symbol, can you apply control solution. If there is no blood drop symbol or control bottle symbol, restart the meter again or change the test mode.

##### **STEP 3:** Apply the Control Solution

1. Check the expiration date and discard dates on your control solution and Safe AQ UG test strip vials. Do not use control solution or test strip which expired.

2. Shake the control solution bottle well, then remove cap. Squeeze the bottle and discard the first drop. Squeeze the bottle again to get a second drop and bring the tip of the test strip to touch the drop of solution until the meter beeps. After 5 seconds' count-down, meter will display blood glucose control solution test result. After 25 seconds' count-down, meter will display uric acid control solution test result.



Uric acid control solution test result

3. Control test results must be within range of the control solution level printed on test strip box. If the result is out of range, test again. If still so, do not use test strips or meter for testing. Call customer service at +86-731-89935581/+86-731-89935582 or contact local dealers for help.

4. Eject the test strip

**Attention:** Discard used test strip and control solution according to local regulations.

Keep control solution away from children and pets.

### Questionable Results:

Probable Cause	Action
Operation mistake	Retest according to correct steps
Control solution not being shaken well	Shake control solution well and retest with a new test strip.
Use the first drop of control solution	Retest with a new test strip
Expired or contaminated control solution	Change a new vial control solution and retest.
Expired or contaminated test strip	Change a new vial test strip and retest.
Temperature is too high or too low	Equilibrate meter, test strip and control solution in room temperature for 30 minutes and retest.
Wrong correcting code	Set correcting code which accordance with test strip package and retest.
Meter malfunction	Contact customer service or local dealers

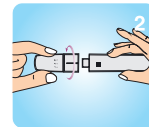
### Blood Glucose and Uric Acid Testing

Prepare meter, strip, lancing device and lancet before test.

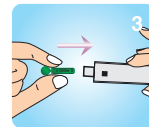
**STEP 1:** Wash your hands or use an alcohol swab to clean the fingertip. **MAKE SURE YOUR HAND IS DRY BEFORE TESTING.**



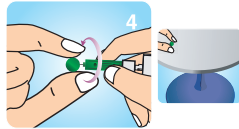
**STEP 2:** Unscrew the lancing device cover.



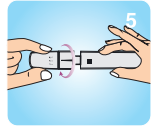
**STEP 3:** Insert a lancet into the lancing device until it comes to a full stop.



**STEP 4:** Twist and pull to remove the lancet protector. Retain the lancet protector for safe lancet disposal.



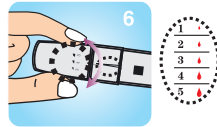
**STEP 5:** Screw the lancing device cover back on.



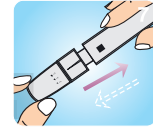
**STEP 6:** Twist the adjustable comfort tip to adjust the puncture depth.

Tips:

- 1-2 (least depth) for soft or thin skin,
- 3-4 (average depth) for average skin,
- 5 (deepest depth) for thick or calloused skin.



**STEP 7:** Pull the spring cover back to arm the lancing



The Sinocare lancing device is prepared and ready to lance your finger for a blood sample.

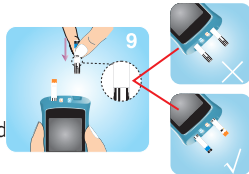
The lancet is for single use only. To prevent the risk of blood borne pathogen transmission, it shall not be shared with other people.

**STEP 8:** Take a strip out of the strip vial. Immediately close the vial lid.

Attention: Finish test within 3 minutes after take out strip. Otherwise test result may be inaccurate.



**STEP 9:** Insert strip into the test strip port, The Safe AQ UG meter will beep and turn on. The port marked with “G” is for blood glucose strip and the port marked with “U” is for uric acid strip. If blood glucose strip inserted, “GLU” will be displayed on the bottom-left of the screen, if uric acid strip inserted “UA” will be displayed on the top-left of the screen. After test strip inserted, the meter will display flashing blood drop symbol and you can apply blood sample.



**Attention:**

- If blood is not applied within 3 minutes, the meter will automatically turn off. Reinsert the strip and begin test.
- If the meter display “E-2”, it means the environment temperature is beyond 40°C or below 5°C, Please put the meter, strip, control solution at appropriate place (10°C~35°C), wait at least 30 minutes and test again.
- The test strip port must be match the inserted strip, or else the meter will not turn on.
- The meter can test blood glucose and uric acid together.

**STEP 10:** Take Blood Sample

Make sure the lancing device is pressed firmly to your finger. Press the button to lance. Attention: If you didn't get enough blood sample, please gently massage your finger. DO NOT SQUEEZE YOUR FINGER. Refer to step 6 to adjust puncture depth and lance again.

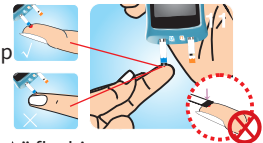


**STEP 11:** Apply blood sample

When the meter screen displays a flashing blood drop symbol “●”, apply the blood sample to the reaction chamber.

**Attention:**

- Apply blood sample only the blood drop symbol “●” flashing.
- Before applying blood sample, the disinfection ethanol in the puncture site should completely volatilize.
- Hold the tip of the test strip to the blood drop until the meter beeps. Visually confirm that the blood sample fills the entire reaction chamber at the end of the test strip.
- Do not move meter or strip and press main button when testing.
- If you didn't apply enough blood sample to test strip, use a new test strip to test again.
- Do not use test strip press finger firmly, otherwise it may cause inaccurate test result.



**Caution:**

DO NOT smear or scrape the blood onto the Test Strip  
DO NOT apply blood to the Test Strip when the Test Strip is not in the test strip port.  
DO NOT put blood or foreign objects into the test strip port.

**STEP 12:** Read the result

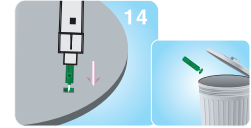
Blood glucose testing: After a 5-second count down, the meter displays the test result in mg/dL or mmol/L .  
Uric acid testing: After a 25-second count down, the meter displays the test result in mg/dL or  $\mu\text{mol/L}$ .



**STEP 13:** Eject the strip.



**STEP 14:** Remove the lancing device cover. With the lancet protector on the table, stick the needle of the lancet into the protector. Eject the lancet and screw the lancet cover back on.



Used test strip and lancet may be biohazardous. Please discard them carefully according to local regulation requirements.  
If the meter is used by multiple people, use 75% alcohol to clean meter surface after testing to avoid pathogen infection.

## Viewing test result

After the meter counts down from 5, your blood glucose results appear along with the unit of measure. After the meter counts down from 25, your uric acid results appear along with the unit of measure. The result is stored in the meter memory. Turn the meter off by removing the test strip. Discard the used test strip carefully to avoid contamination.



Test Countdown



Display uric acid test results



Display blood glucose test results



Display uric acid and blood glucose test results

If blood glucose test results greater than 33.3mmol/L (600 mg/dL), the meter will display “HI”. Retest immediately with a new test strip. If your reading is still “HI”, contact healthcare professional immediately. If blood glucose test results low than 1.1mmol/L (20 mg/dL), the meter will display “LO”. Retest immediately with a new test strip. If your reading is still “LO”, contact healthcare professional immediately. If uric acid test results greater than 1188 μmol/L (20.0 mg/dL), the meter will display “HI”. Retest immediately with a new test strip. If your reading is still “HI”, contact healthcare professional immediately. If uric acid test results low than 181 μmol/L (3.0 mg/dL), the meter will display “LO”. Retest immediately with a new test strip. If your reading is still “LO”, contact healthcare professional immediately.







# Memory

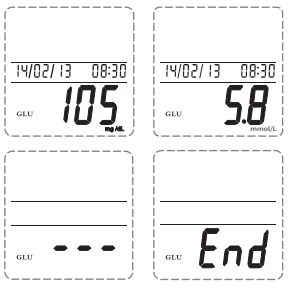
The Safe AQ UG meter stores the 200 most recent results (100 blood glucose test results and 100 uric acid test results) with the date and time in its memory. You can review the individual results by entering the memory mode.

**Note:** You cannot review your test results when the test strip is in the test strip port.





## Step1: Screening Memory

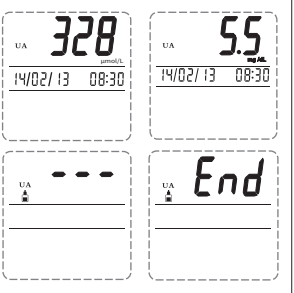
Review blood glucose test result:

- While the Safe AQ UG meter is turned off, press the  button for 3 seconds to turn on the meter, the screen shows your latest blood glucose test result. If there is no test result saved, the display screen will show “---” with beep, when the memory is full, the oldest result is dropped and the newest is added.
- Press the  or  button to view all the blood glucose results in memory. When you have viewed all test results, meter will display “End”, press and hold the  for 3 seconds to turn off meter.




## Review uric acid test result:

- While the Safe AQ UG meter is turned off, press the  button for 3 seconds to turn on the meter, the screen shows your latest uric acid test result. If there is no test result saved, the display screen will show “---” with beep, when the memory is full, the oldest result is dropped and the newest is added.
- Press the  or  button to view all the uric acid results in memory. When you have viewed all test results, meter will display “End”, press and hold the  for 3 seconds to turn off meter.



## Step2: Delete Memory

**Note:** You cannot review your test results when the test strip is in the test strip port.

<p>Press and hold ⏻ for 3 seconds to advance to the screen showing the last test result, and then press ⏻ and ▼ the same time, “---” will appear on the display screen and all the saved test results would be deleted.</p>	<p>Press and hold ▼ for 3 seconds</p> <p>Show the latest blood glucose teste result.</p> <p>press ⏻ and ▼ the same time.</p> <p>“---” will appear on the display screen and all the saved test results would be deleted.</p>	
---	--	---

Press **⏻** button 3 seconds to turn the meter off.

## Information for Healthcare Professional Use

- Only trained healthcare professional be allowed to use Safe AQ UG blood glucose and uric acid monitoring system on multiple patients.
  - Only trained healthcare professional be allowed to collect venous blood samples.
  - Any patient who has infectious diseases must use his/her own meter.
  - If the same meter be used on multiple patients, there is risk of infection between both patients and healthcare professional.
  - Water or other disinfection solution which remains on skin may dilute blood and cause inaccurate test results.
  - Please dispose used lancet, test strips and expired control solution as medical waste.
- Perform test:
1. Wear disposable gloves.
  2. Healthcare professional use an alcohol swab to clean lance site. Then be sure dry stick site before testing.
  3. Use qualified lancing device and choose suitable penetrate depth for patients.
  4. Using lancing device to lance.
  5. Hold the tip of the test strip to the blood sample until the test strip reaction zone is full and the meter begin countdown.



6. Wash hands thoroughly with soap and water after handling the meter, lancing device or test strips.
7. Cleaning and disinfecting meter and lancing device before use on next patient.

### **Comparing Meter with Laboratory Results**

When comparing results between Safe AQ UG blood glucose and uric acid monitoring system and a laboratory system, Safe AQ UG blood glucose and uric acid monitoring system blood tests should be performed within 30 minutes of a laboratory test.

### **Cleaning and Disinfecting**

Clean and disinfect meter immediately after getting any blood on the meter or if meter is dirty.

If the meter is being used on second person, the meter and lancing device should be clean and disinfected first. Do not clean the meter during the test.

To clean the meter:

1. Wash hands thoroughly with soap and water.
2. Make sure meter is off and a test strip is not inserted. Use 75% alcohol to rub the entire outside of the meter. Make sure no liquids enter the test strip port or other opening in the meter.
3. Let meter air dry thoroughly before using to test.
4. Wash hands thoroughly again after handing meter.
5. Verify the meter is working properly by performing control solution test. If your meter can't work properly, please contact customer service at +86-731-89935581/+86-731-89935582 or contact local dealers.

To disinfect the meter:

Please according to clinic institution disinfect method to disinfect the meter.

## Power Saving

If there is no blood applied to the test strip within 3 minutes, the meter will automatically turn off.

After test, the test results will be displayed on the screen with test strip in strip port, If there no operation on the meter within 3 minutes, the meter will automatically turn off.

If there is no other operation on the meter within 1 minute, such as enter into test results review mode, the meter will automatically turn off.

## Performance Characteristics

Accuracy: 95%test result of glucose meet the requirement below:

Concentration Range	Bias%
<5.5 mmol/L(100 mg/dL)	Within $\pm 0.83$ mmol/L( $\pm 15$ mg/dL)
$\geq 5.5$ mmol/L(100mg/dL)	Within $\pm 15\%$

95% test result of uric acid meet the requirements below:

Concentration Range	Bias%
$\leq 297$ $\mu\text{mol/L}$ (5 mg/dL)	$\leq \pm 59.4$ $\mu\text{mol/L}$ (1 mg/dL)
$>297$ $\mu\text{mol/L}$ (5 mg/dL)	$\leq \pm 20\%$

Precision: test result of glucose meet the requirement below:

Concentration Range	Requirement
<5.5 mmol/L(100 mg/dL)	SD<0.34mmol/L(6 mg/dL)
$\geq 5.5$ mmol/L(100mg/dL)	CV<6.0%

Test result of uric acid meet the requirements below:

Concentration Range	Requirement
$\leq 297$ $\mu\text{mol/L}$ (5 mg/dL)	SD < 22.2 $\mu\text{mol/L}$ (0.37mg/dL)
$>297$ $\mu\text{mol/L}$ (5 mg/dL)	CV < 7.5%

Details please refer to blood glucose and uric acid package insert.

## Specifications

Blood volume for blood glucose	About 0.6 $\mu\text{L}$
Blood volume for uric acid	About 3 $\mu\text{L}$
Sample type	Capillary whole blood, Venous whole blood
Calibration	Plasma equivalent
Measuring time for blood glucose	$5 \pm 1$ s
Measuring time for uric acid	$25 \pm 1$ s
Meter storage/transportation conditions	-20°C~55°C

Dimension	108*66*22 (mm)
Weight	About 100g
Power source	3V DC, 10mA, 2 AAA alkaline batteries
Battery life	perform up to 1,000 tests
Display	LCD
Memory	500 blood glucose test results with date and time 100 blood glucose control solution test results with date and time 100 uric acid test results with date and time, 100 uric acid control solution test results with date and time,
Operating condition for blood glucose	Refer to the user manual of blood glucose test strip.
Operating condition for uric acid	Refer to the user manual of uric acid test strip.
Construction	Hand-held
Measurement units for blood glucose	mg/dL or mmol/L
Measurement units for uric acid	mg/dL or $\mu\text{mol/L}$
Measurement range for blood glucose	20~600 mg/dL or 1.1~33.3 mmol/L
Measurement range for uric acid	3.0~20.0 mg/dL or 181~1188 $\mu\text{mol/L}$
Software Version	V01

Additional features
Auto electrode inserting detection
Auto sample loading detection
Auto reaction time count-down
Temperature Warning
Battery power Warning
Used test strips Warning

### Maintenance

- Use of this instrument in a dry environment, especially if synthetic materials are present (synthetic clothing, carpets etc.) may cause damaging electrostatic discharges that may cause erroneous results.
- Electromagnetic Compatibility (EMC): The meter complies with the electromagnetic requirements IEC 61326-2-6: 2012 specified in ISO 15197-2013. Electromagnetic emissions are low and unlikely to interfere with other nearby electronic equipment, nor are emissions from nearby electronic equipment likely to interfere with the meter. Immunity to electrostatic is charge meets the requirements of IEC 61326-2-6: 2012. The meter has been tested for radio

frequency interference at the frequency range and test levels specified by IEC 61326-2-6: 2012.

- Do not use this instrument in close proximity to sources of strong electromagnetic radiation, as these may interfere with the proper operation.
- Avoid dirt, dust, blood, control solution or liquids into the meter test port.
- Do not keep meter in an area where it may be crushed.
- Store blood glucose monitoring system (meter, test strip, control solution) in a dry place.
- Do not freeze.
- Do not store in the kitchen or bathroom.

### Changing the batteries

Make sure your meter is off when you change the batteries.




**Caution:** Keep batteries away from children. If the battery is swallowed call healthcare professional immediately.




Step 1: Slide the battery cover out of the meter.


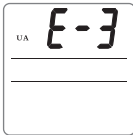
Step 2: Remove the old batteries. Place the new ones in the drawer according to the inner compartment directs of “+” and “-” side.




Step 3: Slide the battery cover back into position until it locks into place.

### Troubleshooting

Display	What it means	What to do
	Your blood glucose test result is below the measurement limit, which is less than 20 mg/dL or less than 1.1mmol/L.	Use a new test strip to test again, if meter still display “LO”, call healthcare professional immediately.
	Your blood glucose test result is higher than 600 mg/dL or 33.3mmol/L.	Use a new test strip to test again, if meter still display “HI”, call healthcare professional immediately.
	Your uric acid test result is lower than 3.0mg/dL or 181μmol/L.	Use a new test strip to test again, if meter still display “LO”, call healthcare professional immediately.

Display	What it means	What to do
	Your test result is higher than 20.0 mg/dL or 1188μmol/L.	Use a new test strip to test again, if meter still display “HI”, call healthcare professional immediately.
	Low battery power.	Replace the batteries immediately.
	Meter is out of the required testing temperature range.	Place the meter and test strip at the operating temperature range. Repeat the test when the meter and test strips have reached a temperature within the operating range.

Display	What it means	What to do
	For blood glucose testing	
	Test method error: insert strip into meter after apply sample to strip.	Insert test strip into meter before apply sample to strip.
	Used blood glucose test strip	Use a new test strip to test again.
	Expired test strip or damped test strip	Use a new test strip to test again.
	Test strip exposed to air more than 3 minutes.	Use a new test strip to test again.
	For uric acid testing	
	Test method error: insert strip into meter after apply sample to strip.	Insert test strip into meter before apply sample to strip.
	Used test strip	Use a new test strip to test again.

Display	What it means	What to do
	Expired test strip or damped test strip	Use a new test strip to test again.
	Uric acid coding failure	Coding again
	Parameter error.	Call Customer Service at +86-731-89935581/+86-731-89935582 or contact your local dealers.

Display	What it means	What to do
Meter does not turn on after inserting a test strip	Battery incorrectly installed	Check that the battery is correctly installed. Pay attention to the “+” sign
	Battery power is low	Replace battery
	Test strip inserted incorrectly	Insert the test strips with the arrow side facing up until it will go no further
	There is no feedback on the display	Remove the battery and wait at least 3 minutes, then reinstall the battery. If the malfunction has not been solved, please contact the manufacturer or the dealer.
	Test strip Inserts into wrong ports	Make sure the right port when insert the test strips. The blood glucose test strip insert into port marked with “G”. The uric acid test strip insert into port marked with “U”
	Poor contact with Insert port	Please contact the manufacturer or the dealer.

Display	What it means	What to do
The meter does not begin to test after applying sample	Insufficient sample	Repeat the test with a new test strip and enough blood sample
	Sample is applied to wrong site of the test strip	Apply the sample into test strip according to the instruction of “Applying sample”
	Used test strip	Use new test strip
Meter displays incorrect test result	The test strip is exposed in air too long after taking out from the vial	Finish the test within 3 minutes after taking out the strips from the vial
	Press the strip too firmly against your finger, sample cannot be smoothly applied.	Gently touch the blood drop to the top edge of the test strip.
	The test strip foil pouch is broken or damaged or left open to air. The test strips in vial is beyond the expiration or the discard date.	Use new test strip

Display	What it means	What to do
Meter displays incorrect test result	Expired test strip	Use new test strip
	Defective meter or test strip	Contact the manufacturer or the dealer
	false test mode	choose the right test mode
without sample applied to, test starts and meter counts down as soon as the test strip is inserted in	The test strip is exposed in moisture environment for too long	use a new test strip
	The test strip is exposed in moisture environment for too long	use a new test strip

If you follow the actions recommended but the problem is not resolved, please contact Customer Service at +86-731-89935581/+86-731-89935582 or contact your local dealers for assistance.

## Explanation of symbols

	Consult instructions for use		Keep dry
	Caution		Keep away from sunlight
	Temperature limit		Serial number
	Manufacturer		Authorized representative in the European Community
	In vitro diagnostic medical device		CE Marking and Notified Body Number
	Fragile, handle with care		Biological risks
	Recyclbarer Abfall		
	Symbol for the marking of electrical and electronics devices according to Directive 2012 /19 / EC . The device, accessories and packaging have to be disposed of waste correctly at the end of the usage, please follow Local Ordinance or Regulatory for disposal.		

## Warranty

Changsha Sinocare Inc. provides the following Warranty to the original purchaser of the Safe AQ UG blood glucose and uric acid monitoring system:

1. Changsha Sinocare Inc. warrants this meter to be free of defects in materials and workmanship from the date of purchase. If the meter does not work properly, Sinocare will replace it with a new meter or equivalent product free of charge. Failure of the meter due to abuse or use not in accordance with the instructions for use is not covered by this Warranty.
2. This warranty does not include the battery supplied with the meter.
3. Do not take the meter apart. This action will void the warranty and cause the meter to display false results.
4. If your meter does not work properly, please fill in warranty card carefully. Use 75% alcohol to clean your meter and send your meter with warranty card to your local dealer.

## References

1. American Diabetes Association Standards of medical care in diabetes-2016.
2. Larsson-Cohn U: Difference between capillary and venous blood glucose during oral glucose tolerance tests. Scand J Clin Lab Invest 36:805-808, 1976
3. The Modern clinical laboratory diagnostics-test and clinical (May, 2009, version 2)



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Thank you for choosing Safe AQ UG blood glucose meter,  
a free replacement under normal operation is provided. Please do  
complete the warranty card and send it back to our agent or our  
factory. we will inform you with information of the meter.  
Thank you for supporting our product and us!

Purchase date: \_\_\_\_\_

Meter No.: \_\_\_\_\_

Please reserve this part, and show it when in need

## Appendix 2 Warranty card (returned to producer)

Name: \_\_\_\_\_ Tel: \_\_\_\_\_

Age: \_\_\_\_\_ Gender: \_\_\_\_\_

Purchase date: \_\_\_\_\_ Meter No.: \_\_\_\_\_

Zip code: \_\_\_\_\_

Address: \_\_\_\_\_

Purchase place (full name of the agent):

\_\_\_\_\_

\_\_\_\_\_

Please complete the table correctly, we will provide you with  
an excellent after-service.



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