

## OralChroma FREQUENT ASKED QUESTIONS.

**Q:** Is it necessary to measure three breath gas components; hydrogen sulfide, methyl mercaptan, and dimethyl sulfide?

**A:** In the dentistry industry, these three gases are said to be the three major components of halitosis. And it is said that the cause of halitosis may be identified by measuring these three gases.

**Q:** Why is the cognitive threshold different among these three gases?

**A:** Refer to the public papers for the cognitive threshold.

**Q:** Can OralChroma identify three VSCs?

**A:** Yes. OralChroma is only a device which can separate halitosis into 3 components and measure each gas concentration. It is an apparatus to acquire data to use for reference of medical treatment by the dentist.

**Q:** In which countries do you sell OralChroma?

**A:** Release was started in Japan about ten years ago, and it is sold in about 30 countries worldwide.

**Q:** There is another halitosis measuring device, "Halimeter", on the market. What is the difference between Halimeter and OralChroma?

**A:** The Halimeter measures only the total amount of VSCs in halitosis, it cannot separate the halitosis into each component. OralChroma uses a gas chromatography method and distinguishes 3 major components from total VSCs and measures those concentration, independently. Only the OralChroma now on the market uses a gas chromatography method as a halitosis measuring device.

**Q:** How many units of OralChroma have you sold so far?

**A:** About 800 units in Japan and 300 overseas, in total 1100 units.

**Q:** Why can't I use the OralChroma immediately after power-on?

**A:** Some waiting time is needed until the gas sensor in the OralChroma becomes stable. If an OralChroma is used during this wait period, you cannot expect accurate measurement. If the OralChroma's power-off time is short, the required wait time also becomes short.

**Q:** The waiting time varies depending on the day. Why?

**A:** This time depends on (1) how long the device has been powered off and (2) some interference gases in the ambient atmosphere.

**Q:** The Wait mode may be turned on immediately after the Ready mode comes on. Why?

**A:** When there are interference gases around the OralChroma, the gas sensor in the device may respond to such gases, causing the output to fluctuate. Then the mode enters Wait. When such interference gases are exhausted, the mode will return to Ready.

**Q:** How soon should I inject the sample gas into the OralChroma after sampling the breath?

**A:** As soon as possible. **Shorter than one minute is recommended.**

**Q:** Can I measure the breath immediately after eating and drinking? If I can't, how long should I wait?

**A:** You can measure the breath at any time. But oral condition in the mouth is influenced by eating/drinking. Please consider these obtained results just as a reference. Wait for 30 minutes at least, more than one hour preferably. If alcohol has been consumed, do not measure during that day.

**Q:** Why should I take 0.5cc? What happens with more than or less than 0.5cc?

**A:** Because the gas concentration is calculated at the amount of 0.5cc. More than or less than 0.5cc injection may influence the measurement results. Please keep the 0.5cc injection as accurate as possible.

**Q:** When I inject the breath into the device, is there any time limit for injection? Should I inject it rapidly or slowly?

**A: Push the plunger as quickly as possible.** If the injection is too slow, gas response might not be correct, causing inaccurate measurement results, even though measurement will commence.

**Q:** The output decreases to the lower direction in the beginning of the chromatogram chart.

Why is this?

**A:** Immediately after injecting the breath, the flow rate will fluctuate. This is not a problem.

**Q:** A large peak appears before the peak of hydrogen sulfide. Why is this?

**A:** This peak shows various gases included in the breath, such as hydrogen, nitrogen, and carbon monoxide. As such gases are not bad breath components, there is no problem.

**Q:** How is the gas concentration calculated? By peak area, height or others?

**A:** The concentration is calculated using peak height.

**Q:** The chromatogram sometimes gradually decreases in the latter part of the measurement.

Why?

**A:** The output of the sensor may not be completely stable during the measurement. In that case, the output may gradually decrease or increase. This causes no trouble. If the output becomes more unstable, the device will change to the state of "Wait" from "Ready", causing you to **wait until the device becomes stable**.

**Q:** If there is a long waiting time until the next measurement after the measurement was finished, what causes this?

**A:** When your breath contains some gases whose peaks appear after the 8 min measurement, such gases may cause the sensor output to be unstable. It takes a longer time for the device to switch from "Wait" to "Ready."

**Q:** If I inject the breath during "Wait" status, what should I do?

**A:** The measurement will not start if the status is "Wait." Please start the measurement after it becomes "Ready."

**Q:** Why do you have two kinds of gas concentration units?

**A:** One unit of "ng/10ml" is used mainly in universities or research organizations. The other, "ppb" is used in dental clinics.

**Q:** The measurement range is specified as 50ppb to 1000ppb. Does this mean that I cannot measure the concentration near the cognitive threshold of dimethyl sulfide accurately?

**A:** You are right. The threshold is very low which we cannot guarantee. But you can monitor the change of the concentration with elapsed time.

**Q:** What happens if the data in the device exceeds 99?

**A:** The 100th data will be overwritten to the 1st data. 101st to 2nd, and so on.

**Q:** Can I recall the disappeared data?

**A:** Unfortunately, you cannot.

**Q:** If the supplied syringes are out of stock, can I use any other types of syringe which can contain 0.5cc?

**A:** Use the syringe we specify. If you use another syringe, some interference gases may be released from the inside surface, and may have a large effect on the measurement accuracy.

**Q:** Even if the device repeatedly measures the breath of the same person, the obtained values may be greatly different. Why is this?

**A:** The state in the oral cavity always changes. Accordingly, the breath gas components change with time. As a result, repeatedly obtained data for the same person will also change. In addition, since the breath gas components are not uniform in the oral cavity, the syringe position in your mouth may change the measured values. But, please contact the agency from which you purchased it if a very big difference occurs each time, which could be a fault in the device (sensitivity deterioration, etc.)