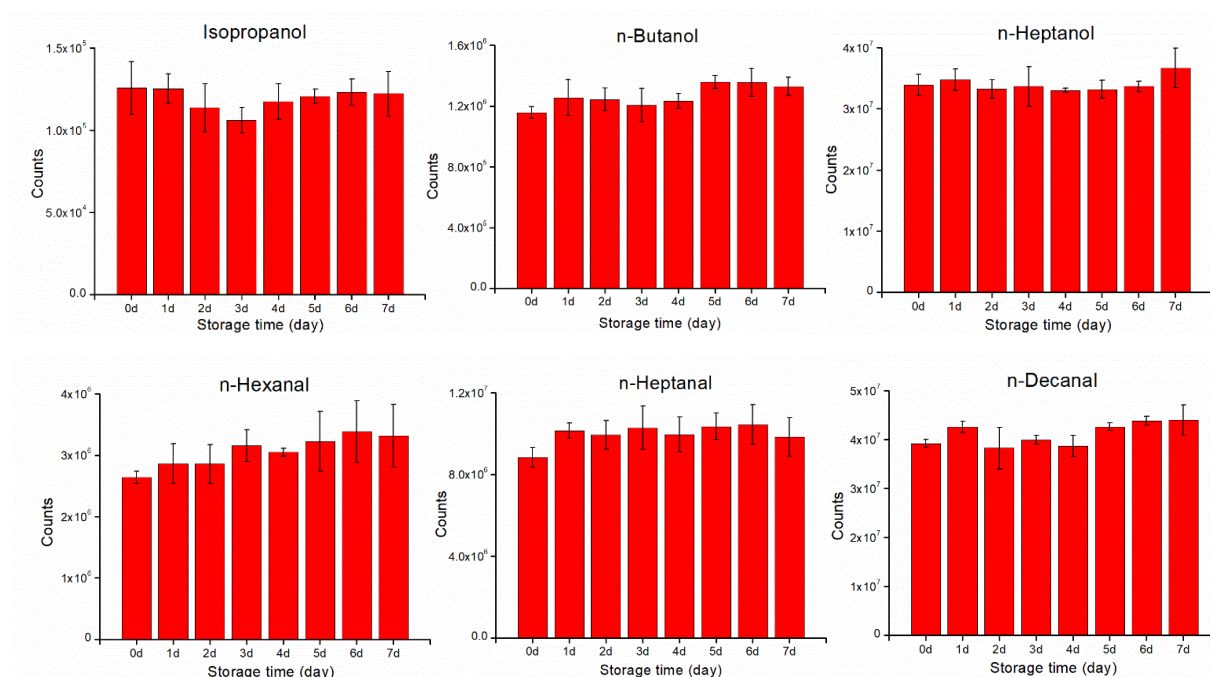


## Supplementary



**Figure 1.** Concentrations of isopropanol, n-butanol, n-heptanol, n-hexanal, n-heptanal, and n-decanal (100 ppbv for each compound) in Tedlar bags at -40 °C are nearly constant within seven days, indicating a good storage stability.

**Table1. Requirements for researchers during breath sampling**

<b>Requirements</b>	<b>Aims</b>
Pump out air from Tedlar bag fully	Prevent ambient air contamination
Ensure Tedlar bag is tightly sealed	Prevent ambient air contamination
Connect mouthpiece to Bio-VOC sampler tightly	Avoid exhaled gas leakage during expiration
Rotate the three-way valve to an accurate angle	Avoid dead space gas entering the Tedlar bag
Explain to subjects clearly: Do not take a deep breath; Nasal ventilation is not allowed; Blow slowly and entirely.	Guarantee the collection of late expiratory breath; Avoid dead space air contamination.
Adjust the Bio-VOC plunger and the three-way valve immediately	Avoid ambient air entering the Bio-VOC syringe; Avoid sample leakage during transfer from Bio-VOC to Tedlar bag.
Close the intake valve of Tedlar bag quickly and tightly	Avoid exhaled gas leakage; Prevent ambient air contamination.
Place breath sample in a cold container (2-8 °C)	Avoid squeezing of sample bags; Avoid volatilization of exhaled gas.
Clean the Bio-VOC syringe with dry dust-free cloth before the next use	Prevent cross-contamination