

**SAMPLING INSTRUCTIONS FOR
(SOC) SYNTHETIC ORGANIC CONTAMINANT
EPA METHODS 504, 505, 515.2, 552.1, 531.1, 547, 548.1, 549.1, and 525.2**

All analytical request forms must have sampler's name and phone number. We must also have the reporting address, which is usually the water systems address.

I. SOC SET BOTTLES GROUP REQUIREMENT AND PRESERVATIVES:

- 2 - 40 ml clear vials labeled 504, (Preservative is added at sampling)
- 1 - 40 ml clear vials labeled 504B, (Traveling Blank filled with DI Water)
- 2 - 40 ml clear vials labeled 505, (No Preservative)
- 1 - 40 ml clear vial labeled 531, (1.2 ml $\text{ClCH}_2\text{CO}_2\text{H}$)*
- 1 - 40 ml amber vial labeled 547, (No preservative)
- 1 - 125 ml amber bottle labeled 552, (12 mg NH_4Cl)**
- 1 - 125 ml amber bottle labeled 548, (No preservative)
- 1 - 1L amber bottle labeled 515, (2.5 ml of 50% HCl)***
- 2 - 1L amber bottle labeled 525, (2.5 ml of 50% HCl)***
- 1 - 1L amber plastic bottle labeled 549, (1 ml Concentrated H_2SO_4)****
- 1 - ½ oz dropper with 50% HCl

* $\text{ClCH}_2\text{CO}_2\text{H}$ = Monochloroacetic Acid Buffer

** NH_4Cl = Ammonium Chloride

*** HCl = Hydrochloric Acid

**** H_2SO_4 = Sulfuric Acid

Samples for method 504 must be preserved at the time of sampling with 50% HCL.

1. Fill vial $\frac{3}{4}$ full, add 3 drops of HCL
2. Without spilling any sample finish filling the vial slowly until it forms a bulging meniscus.
3. Carefully place the cap and tighten. Turn vial up side down and shake it.
4. Wait a few seconds and check for any air bubbles. Repeat the same procedure with the other vials.

All SOC sets are prepared at the lab and distributed to the sampler as stated above. A Request ID Sticker must be placed on appropriate bottles. Request ID Stickers are labeled ending with the letters A through N.

****Note: Use these Request ID stickers ONLY when sampling MORE THAN ONE method at a site. Use the Request ID stickers A through D when sampling ONLY ONE method.**

Request ID example: U123456A, U123456B, U123456C, U123456D, U123456E, U123456F, U123456G, U123456H, U123456I, U123456J, U123456K, U123456L, U123456M, U123456N.

1. Sample vials 1 & 2 for method 504 use Request ID A & B.
2. Sample vial 504B use Request ID C.
3. Sample vials 1 & 2 for method 505 use Request ID D & E.
4. Sample bottle for method 515 use Request ID F.
5. Sample bottle for method 552 use Request ID G.
6. Sample vial for method 531 use Request ID H.
7. Sample vial for method 547 use Request ID I.
8. Sample bottle for method 548 use Request ID J.
9. Sample bottle for method 549 use Request ID K.
10. Sample bottles for method 525 use Request ID L & M.
11. Analytical Request Form use Request ID N.

When a waiver is given to a water system for any method, make sure that the corresponding Request ID is not used.

Samples for methods 548.1 and 549.1 must be analyzed with in 7 days.

Samples for methods 504, 505, 515.2, 547, 552.1, and 525.2 must be analyzed with in 14 days.

Sample for method 531 must be analyzed with in 28 days.

II. For chlorinated water systems the bottles are prepared with a dechlorinating agent first then the preservative is added at the sampling site: This preparation will only be done upon samplers request.

Method 504 = Vials 1 & 2 use 3 mg of $\text{Na}_2\text{S}_2\text{O}_3$. (2-3 drops of HCl)

Method 505 = Vials 1 & 2 use 3 mg of $\text{Na}_2\text{S}_2\text{O}_3$. (No preservative)

Method 515 = Bottle contains 80 mg of $\text{Na}_2\text{S}_2\text{O}_3$. (2.5 ml of 50% HCl in a small vial)

Method 552 = Same as non-chlorinated system.

Method 531 = Vial use 4 mg of $\text{Na}_2\text{S}_2\text{O}_3$. (1.2 ml of $\text{ClCH}_2\text{CO}_2\text{H}$ in a small vial)

Method 547 = Vial use 4 mg of $\text{Na}_2\text{S}_2\text{O}_3$. (No preservative)

Method 548 = No dechlorination for this bottle.

Method 549 = 100 mg $\text{Na}_2\text{S}_2\text{O}_3$. (1 ml Concentrated H_2SO_4 in a small vial)

Method 525 = 50 mg Na_2SO_3 . (2.5 ml of 50% HCl in a small vial)

$\text{Na}_2\text{S}_2\text{O}_3$ = Sodium Thiosulfate

Na_2SO_3 = Sodium sulfite (used for 525)

Fill sample bottle nearly full, cap, and shake to dissolve dechlorinating agent. Add preservative and finish filling with water sample. Use bottle labels for indicating location, date, and time of sampling.

Packing Cooler:

A maximum of two sets of SOCs may be packed in one cooler. Paperwork for each must accompany the samples. Make sure that bottles are separated using the gray foam holders (for 40 ml vials) to prevent breaking. We supply plastic cubitainers to be used for ice (fill with water leaving 1inch space at the top, freeze). Use the frozen cubitainers to separate samples in the cooler. Make sure cooler is labeled with a return address and sealed securely.