

Acid Acceptance Test - Instructions

Sample

- 1) Obtain a sample from the vapor degreaser water separator or spray wand.
 - Do not obtain the sample from the boiling sump.
 - Be sure to avoid sampling the water layer from the water separator.
- 2) Let the sample cool to room temperature.
- 3) Ensure that all the test equipment is clean and dry.
- 4) Use the eye dropper to add 1.50 ml of Bromothane™ to the snap-lid container
 - Fill the dropper to the graduation mark on the eyedropper between the 1.0 and 2.0 ml to obtain 1.50 ml of sample (see Figure 1).
 - Make sure the bottom of the meniscus is just touching the mark on the eyedropper to maximize test accuracy.

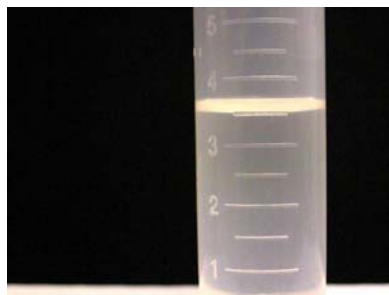


Figure 1.
The correct sample eye dropper fill volume is shown. Note that the meniscus is just touching the 1.50 ml graduation.

- 5) Add **Solution A** (red label), up to the 3.50 ml mark on the side of the snap-lid container.
 - The 3.50 ml graduation mark on the snap-lid container is one-half way between the 3.0 and 4.0 mark.
 - Add **Solution A** slowly to ensure the 3.50 ml mark is not surpassed on the snap-lid container.
 - Do not shake the container during the addition.
 - To maximize test accuracy, add **Solution A** until the bottom of the meniscus is just touching the 3.50 ml graduation on the snap-lid container. (see Figure 2 for example of correct fill volume)
 - When the addition of **Solution A** is complete, promptly replace the cap.

Figure 2.

The graduated snap-lid container as it appears after Solution A has been added. Note that the meniscus is just touching the 3.50 ml graduation.



- 6) Snap the lid in place and lock it with the safety tab. Shake the container to mix contents thoroughly.
- 7) Let the prepared sample stand for at least ten minutes before continuing.
 - Failure to let the sample stand for a full ten minutes before completing the next step will result in test results that are inaccurately low.
- 8) Add **Solution B** (green label) to the snap lid container, counting drop by drop, until the solution changes from pale yellow to blue color
 - Hold the **Solution B** bottle at a 45° angle when adding the drops to provide appropriate and consistent drop size and to maximize test accuracy.
 - The change to blue color occurs quickly. Adding **Solution B** drop by drop with interim shakes of the snap-lid container will ensure an accurate drop count is obtained.
 - Cap the snap-lid container before shaking to prevent sample loss due to splashing.
 - Shake the snap-lid container between drop additions to maximize test accuracy.
 - When the addition of **Solution B** is complete, promptly replace the cap.

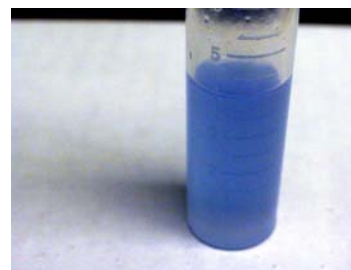


Figure 3.
The sample color will change to bright blue color when Solution B is added.

- 9) Write down the number of drops needed to obtain the blue color.
- 10) Discard the sample in a site-approved manner, rinse the snap-lid container two times minimum with water, and dry thoroughly prior to reuse.

Calibration Check

- 1) Add **Solution A** (red label) to the 2.0 ml mark on the snap lid container.
 - To maximize test accuracy, add **Solution A** until the bottom of the meniscus is just touching the 2.0 ml graduation on the snap-lid container.
 - When the addition of **Solution A** is complete, promptly replace the cap.
- 2) Add **Solution B** (green label) to the snap lid container, counting one drop at a time, until the solution changes from pale yellow to blue.
 - Shake the container between drop additions to maximize test accuracy.
 - Cap the snap-lid container before shaking to prevent sample loss due to splashing.
 - When the addition of **Solution B** is complete, promptly replace the cap.
- 3) When the solutions are good, the blue color will be seen after about 50-58 drops of **Solution B** have been added.

Stabilizer Addition to Bromothane™

Determine the Booster Package Addition Factor

1. From the table below, select the Factor corresponding to the number of drops of **Solution B** used to obtain a color change. The factor is used to calculate the amount of stabilizer booster package added to restore Bromothane™ Acid Acceptance.

Bromothane S		Bromothane R		Bromothane E	
Drop Number	Factor	Drop Number	Factor	Drop Number	Factor
<15	Normal	<23	Normal	<30	Normal
20	0.031	26	0.032	32	0.033
30	0.052	33	0.046	35	0.039
35	0.063	37	0.054	39	0.046
>40	Replace Solvent	>40	Replace Solvent	>40	Replace Solvent

2. Multiply the **Factor** from the above table by the number of gallons of solvent being tested to determine the amount of stabilizer booster package to be added.

Example:

- A test sample is taken from a vapor degreaser holding 150 gallons of Bromothane™ S.
- Your test shows that it takes 30 drops of **Solution B** to obtain a blue color.

The degreaser would require about 8 gallons of stabilizer booster package to restore acid acceptance (150 gallons X 0.052 factor = 7.8 gallons of stabilizer booster package).

Adding Stabilizer Booster to a Degreaser

1. Cool the vapor degreaser to room temperature prior to adding the stabilizer booster package.
2. Add the stabilizer booster package to the clean sump of the vapor degreaser. Stabilizer Booster is a flammable liquid; consult the MSDS for details.
3. Turn on the vapor degreaser and allow it to equilibrate for a minimum of 2 hours.
4. Check the acid acceptance.
 - If needed, add additional stabilizer
 - If normal, routine vapor degreaser operations can resume

Acid Acceptance Test Kit



**Great Lakes
Chemical Corporation**