

# Re: Tryptone broth growth for sterility check

---

*Source:* <http://sci.tech-archive.net/Archive/sci.chem/2006-03/msg00355.html>

---

- *From:* "Ron Jones" <[ron@xxxxxxxxxxxxxxxx](mailto:ron@xxxxxxxxxxxxxxxx)>
  - *Date:* Fri, 24 Mar 2006 19:35:14 -0000
- 

DSRM wrote:

We've started testing our microbiology dilution water for sterility (after autoclaving) by adding some double strength tryptone broth and incubating for 24 hours. I've never done this before.

What exactly constitutes growth?

Our first test had alot of what looked like white sediment on the bottom of the sample and the smple was cloudy. I wasn't sure if this was growth or some sort of precipitation.

I set another batch and I purposely contaminated some and put in some plain DI water. Still they all looked the same.

I checked the autoclave settings and saw that they had it set for the mininum 15 minute hold at 122° C.

I tried another batch with a 30 minute hold. The contaminated samples still looked the same but the uncontaminated samples were only a little cloudy. It made no difference whether the bottles were in the middle of a cluster with no air space between them or if they were alone with plenty of surface exposure.

Does the cloudiness constitute growth (I think it does)?

Do you find that sterilization of water requires more than a 30 minute hold time?

Thanks.

Very rusty....(UK "A" level, way, way back in '75.) Are you looking for coliforms? ISTR using an upside down mini test tube in the big test tube of broth (the small tube is full of liquid), then when the gas producing bacteria multiply the gas collects in the tiny tube and the observation of a large bubble of gas gives you a positive result.

--

Re: Tryptone broth growth for sterility check

Ron Jones

Process Safety & Development, Alfa Aesar Avocado Lancaster UK

Don't repeat history, see unreported near misses in chemical lab/plant  
at <http://www.crhf.org.uk>

Only two things are certain: The universe and human stupidity; and I'm  
not certain about the universe. ~ Albert Einstein

.