LIQUI-CULT MICROBIAL TEST KIT



Liqui-Cult test kits are used to detect microbial growth in fluids. Areas of application include: metalworking fluids, circulating cooling and process water, cleaners, cosmetics. detergents, and liquid soaps. Excellent for testing all types of hydrocarbons, i.e., fuel, fuel storage tanks, aviation/ship board storage and ground transportation vehicle fuel systems.

DIRECTIONS FOR USING THE LIQUI-CULT[™]

- 1. Remove seal from metal cap of test bottle.
- 2. Take cap, not guard, off needle and press into plunger nozzle, leaving needle guard in place until ready.
- 3. Remove needle guard and insert tip into liquid sample. Draw plunger back, filling syringe with complete 5cc's of sample fluid.
- 4. Inject needle thru rubber cap and push down on syringe plunger, emptying contents into bottle. Remove syringe from bottle, replace needle guard and discard according to local, state and federal guidelines. Shake bottle vigorously to mix.
- 5. Incubate bottle at room temperature for 30 hours for microbial growth and 72 hours for fungal growth.
- 6. To measure:

<u>For bacterial growth:</u> after 30 hours, compare bottle to color density chart on reverse side of these instructions. <u>For fungal growth:</u> after a full 72 hours, compare the test bottle to the density levels on the chart. 7. If it is necessary to dilute samples, for viscosity reasons. <u>The following procedure is recommended:</u>

> Dilute by adding 1 ml to 99 ml. of boiled, cooled tap water in a clean container. Add 1 ml. of the test sample to the diluent, cap the container and shake vigorously. Then proceed with the above directions. Take the dilution factor into account when estimating growth. For example: a 105 count from a 1/100 dilution of fluid would indicate 107 organisms per ml. in the original sample.

- 8. <u>STORAGE:</u> Liqui-Cult[™] should be stored at room temperature. (68-75° degrees F) Protect from light. Need not be refrigerated.
- <u>DISPOSAL OF USED MATERIALS</u>: Under a fume hood fill the bottle with bleach . ..let stand for 24 hours. Then discard in an appropriate manner. Needles and syringes should be disposed of within local, state and federal guidelines.
- 10. See reverse side for a visual detailed chart determining bacterial and fungal growth levels.

MONITORING BACTERIAL GROWTH



BACTERIAL GROWTH:

The above chart is to be used for comparison 30 hours after fluid samples are injected and incubated.

FUNGAL GROWTH:

The above chart is to be used for comparison 72 hours after fluid samples are injected and incubated.