

D.O. Kit Reagents: Toxics with a life of their own.

(revised 3/04)

Picture the scene. You have launched your watercraft for the first time in 2004. The motor starts first try! ...*Always a good omen.* You decide it is a perfect day to sample your lake. *NO one else is on the water!* One of those rare occasions to be savored. You go back to your house and look around the garage/cellar. *There it is!* Stored away from the reach of little ones...all the monitoring equipment...carefully and neatly put away so that it is ready for a day such as this!

You untie the plastic bag and pull out the scope. *Good. No spiders. Not a web...or even dust!* Putting it away clean has its rewards. And the disk, being a bit heavier, is at the bottom of the bag. The note on it says: cleaned and checked October 03. *Good.* Next is the grab sampler. Again you've done well. The item is clean and the rubber bungee still works because you made sure it was kept out of sunlight last year. *No worries...yet.* The six glass sample bottles are intact. And there is a milk jug with a cap for collecting spent samples.

Then last but not least, the little black box. You have to wonder if it is black for a reason. You wince and your brow wrinkles as you try to remember...*did I buy new chemicals for this kit last year? ...the year before?* The bottles don't seem to be of any help. They are labeled with barely pronounceable chemical names, a bunch of tiny, barely readable words, a lot number, and for the first time you notice one is labeled poison, then another, and still another! *Yes.* You vaguely remember that the spent samples are collected in the milk jug and diluted before they are discarded...sprinkled on the ground away from your well. This must be why. Back to the immediate question: *are these chemicals any good? Can I use them today?*

Good news. Not all of the chemicals need to be replaced every year! Shelf life is based on optimum storage conditions: 65-75 F, away from heat/freezing, high humidity, etc. Exposure to these conditions will decrease the shelf life. This table lists recommended shelf lives for the chemicals in the LaMotte D.O. Test Kit.

<u>Chemical</u>	<u>Shelf Life</u>
Sodium Thiosulfate (# 4169)	1 year
Starch Indicator (# 4170)	1.5 years
*Mang. Sulf. (# 4167)	3 years
*Alk. Pot. Iodide Azide (# 7166)	3 years
*Sulfuric Acid (# 6141)	3 years

And, there is a way to tell how old those nasties are using the Lot number of the LaMotte chemicals! The first 3 digits of the lot number on the lower left side of the label represent the date of manufacture. The first 2 digits represent the week of the year, ranging from 01 to 52. The third digit represents the last digit of the year. For example, a lot number starting with 242 was made in the 24th week of 2002. (Since few of us refer time by number of week in the year, the table to the right of this column may be handy to keep.) These two tables should help you figure out if when the chemical in question is no longer any good.

Are you ready for a quiz? Your Starch Indicator has a Lot number beginning with 173. Is it good to use? When should it be replaced?

Approx. week # for first week of each month

<u>Month</u>	<u>1st Week #</u>
Jan	01
Jan/Feb	05
Feb/Mar	08
April	13
April/May	17
May/June	21
July	26
July/Aug	30
Aug/Sept	35
Oct	40
Oct/Nov	44
Nov/Dec	48

***Be sure to read the Material Safety Data Sheets that come with your kit. These sheets recommend that gloves and safety glasses be used when handling the poisonous substances and also recommend that they be used in an adequately ventilated area.**

Answer:
Yes, through Oct. 2004; should be replaced at beginning of field season 2005