ENVIRONMENTAL HEALTH AND SAFETY
Illinois State University

# Testing of Peroxide Forming Chemicals Using MQuant Test Strips

1. Visually inspect bottle for:
    a. Crystallization (especially around cap or in the liquid)
    b. Visible discoloration
    c. Liquid stratification
2. Use glass Pasteur pipet to get small amount of liquid
3. Put drop on square test field on test strip
4. Shake off excess liquid
5. Add one drop of DI water when testing an organic solvent
    a. (Do not need to add any water for inorganic solutions)
6. Write results on label
    a. Include date, value, and your initials
7. Allow test strip to evaporate, then throw away in the trash

| **QUANTITATIVE TESTING**<br>AFTER VISUAL INSPECTION, COMPLETE QUANTITATIVE TESTING. IF PEROXIDES ARE DETECTED, FOLLOW THESE RECOMMENDATIONS FOR CONTINUED USE OR DISPOSAL: | |
|---|---|
| **1 PPM** | Okay to keep; Do not concentrate to near-dryness. |
| **3 PPM** | Okay to keep; Do not concentrate to near-dryness. |
| **10 PPM** | Okay to keep, but must now test every month; Do not concentrate to near-dryness. |
| **>10 PPM** | Get 0-25ppm test strips from Stockroom to get accurate readings; Do not concentrate to near-dryness. |
| **≥20 PPM** | 19ppm is the maximum level that the hazardous waste hauler will transport. Combine, bulk, or inhibit/stabilize until ppm is 19ppm or less. Stockroom has test strips that read more accurately between 0-25 ppm. Do not concentrate to near-dryness. |
| **>20 PPM <100 PPM** | Not recommended for distilling or concentrating. |
| **≥100 PPM** | DO NOT USE. Contact EHS for assistance. Additional testing may be required prior to disposal. |