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Introduction

Many chemicals, most notably ethers, are susceptible to decomposition, resulting in the formation of peroxides and are explosive products. Ethers, liquid paraffins and olefins form peroxides on exposure to air and light. Always consult the MSDS sheet of each chemical and follow the manufacturer's recommendation on safe handling of chemicals. A few examples of compounds prone to peroxide formation are: cyclohexene, dimethyl ether, diethyl ether, dioxane, isopropyl ether and tetrahydrofuran (THF).

Associated Procedure

- ⌘ All peroxidizable chemicals must be prevented from peroxide formation as much as possible. Preventative measures include storage in opaque containers and minimizing the rate of decomposition by storing at the lowest possible temperature consistent with the solubility or freezing point of the chemical
- ⌘ Discard opened container of ether after ½ year or purify the chemical before use
- ⌘ Discard unopened container of ether after 1 year or purify the chemical before use
- ⌘ Ensure that a schedule is made to check the condition of containers

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