



Fact Sheet

Q&A Regarding Hydrogen Peroxide

What are the typical uses of hydrogen peroxide?

Hydrogen peroxide has a wide range of applications. Industrially, the largest use is for pulp & paper bleaching, but it also has important application in chemical synthesis, steel production, and wastewater treatment. Consumer applications of hydrogen peroxide include hair care, tooth bleaching, disinfection, and laundry bleaching.

Hydrogen peroxide is available in a wide range of strengths. Industrial applications typically are served with concentrations between 35% and 70%. Consumer applications are generally supplied with far lower, and therefore less hazardous, concentrations. Typical "drugstore" hydrogen peroxide has a concentration of 3%. Concentrations for other consumer applications may be somewhat higher but will always be substantially lower than industrial grades.

How often is it used for wastewater treatment?

ACC does not obtain or retain use statistics. The members of the HP Panel believe it is a growing use for hydrogen peroxide.

How much is produced in the U.S.?

There are essentially six major producers in the United States that produce (millions of pounds). ACC does not obtain or retain actual production statistics.

Is it regulated as a toxic chemical?

Hydrogen peroxide is categorized as a hazardous material that is regulated by the federal government both onsite and during transportation. In fact, it is also regulated under the new DHS chemical facility security regulations.

Is it very unstable?

Properly manufactured and handled, hydrogen peroxide is quite stable - losing only about 1% of its concentration per year.

What makes it more unstable?

The principle causes of instability are high temperatures and contamination. Contamination can occur in a variety of ways but most commonly results from inadvertent mixture with strong acids



or bases, or the introduction of transition metals as a result of storage in inappropriate or improperly prepared containers.

How do you make sure it doesn't fall into the wrong hands?

Our member companies have invested more than \$5 billion to enhance security at their facilities under the ACC's mandatory Responsible Care Security Code. In addition our members closely monitor hydrogen peroxide during shipment, screen and visit customer facilities, regularly audit and train customers in the safe/secure handling, use and storage of hydrogen peroxide.

How hard is it to get 35% hydrogen peroxide in mass quantities?

Many local authorities have alerted chemical distributors to watch for large purchases of hydrogen peroxide and report them. In addition, DHS in the United States and the Bureau of Explosives in Canada are monitoring the uses of higher concentrations of hydrogen peroxide under the new chemical security regulations.

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The American Chemistry Council (ACC) represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make people's lives better, healthier and safer. ACC is committed to improved environmental, health and safety performance through Responsible Care[®], common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The business of chemistry is a \$635 billion enterprise and a key element of the nation's economy. It is one of the nation's largest exporters, accounting for ten cents out of every dollar in U.S. exports. Chemistry companies are among the largest investors in research and development. Safety and security have always been primary concerns of ACC members, and they have intensified their efforts, working closely with government agencies to improve security and to defend against any threat to the nation's critical infrastructure.

