



Dihydrogen monoxide (DHMO) is an interesting compound that is not getting the attention and public debate it deserves. As with most chemicals, it has many uses and with its use come hazards and benefits. Is it the silent killer that environmentalists and health officials claim? Is it really being used in nuclear power plants and being stockpiled by terrorist groups around the world? Has it already led to the death of thousands of innocent children? Or is it the benign chemical that military and powerful industrial officials claim is essential to their operations and is it completely safe if handled properly?

Assignment: Write a paper defending your opinion on dihydrogen monoxide. Research this issue on the Internet and use facts and data to back up your opinion.

Ban Dihydrogen Monoxide!

Teacher Notes

Introduction

Is dihydrogen monoxide a silent killer or is it essential for all life on this planet? As citizens and voters, your students will continually face these types of issues. Today, society faces very serioius issues, such as allowing stem cell research, cloning, and burying our nuclear waste, to name a few. Informed citizens must learn to separate serious issues from hyped issues and to identify what is credible and pertinent in order to form a knowledgeable opinion. All sources of information are not equal nor are they all credible. The Internet is full of great information but it also contains appalling misinformation—how do you decide?

Concepts

- Research
- Current events
- Chemical hazards
- Internet searching

Background

The Internet has a plethora of web sites dedicated to the issue of banning dihydrogen monoxide, also called hydrogen hydroxide, hydroxyl acid, or water. Your students should enjoy researching this chemical and hopefully enjoy the "aah hah" when they realize they are researching water.

Searching "DHMO" using Google[™] will result in more than 10,000 hits. Some of the more interesting web sites are:

www.dhmo.org/ [Dihydrogen Monoxide Research Division of the U.S. Environmental Assessment Center]

www.circus.com/~nodhmo [Coalition to Ban DHMO]

www.armory.com/~crisper/DHMO/ [DHMO, your all-natural friend]

www.mercola.com/2002/mar/30/dhmo.htm [Dr. Mercola, the world's most visited and trusted natural health web site]

www.ghg.net/redflame/DHMO.html [a DHMO song]

Going Further

Unleash the creative energy of your students by having them do one or more of the following:

- 1. Design a petition to either support or protest the banning of DHMO. See how many students, teachers, and parents will sign the petition.
- 2. Develop a survey and ask students, teachers, parents their opinion of banning DHMO. Is there a difference in opinion based on gender, age, education, political affiliation, or profession?
- 3. Design a marketing campaign (posters, commercials, talk show hosts) to convince the American public that we need to Ban/Allow DHMO.

Connecting to the National Standards

This laboratory activity relates to the following National Science Education Standards (1996):

Unifying Concepts and Processes: Grades K–12 Systems, order, and organization Evidence, models, and explanation Content Standards: Grades 5–8 Content Standard A: Science as Inquiry

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Content Standard E: Science and Technology

Content Standard F: Science in Personal and Social Perspectives, personal health; natural hazards, risks and benefits, science and technology in society

Content Standard G: History and Nature of Science, science as a human endeavor, nature of science

Content Standards: Grades 9–12

Content Standard A: Science as Inquiry

Content Standard E: Science and Technology

Content Standard F: Science in Personal and Social Perspectives, personal and community health, natural resources, natural and human-induced hazards, science and technology in local, national, and global challenges Content Standard G: History and Nature of Science, science as a human endeavor, nature of scientific knowledge

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