

COMPLYING WITH THE OSHA HAZARD COMMUNICATION STANDARD

**Make sure you understand the
chemical hazards within your practice.**

by Stephen C. Miller, O.D.

The Occupational Safety and Health Administration (OSHA) estimates about 32 million workers may be exposed to one or more of 575,000-plus known chemicals annually. This number includes many health care workers. Since chemical exposure may cause or contribute to many serious health problems, OSHA has established regulations regarding the use of hazardous chemicals in the workplace, to help protect workers.

The OSHA Hazard Communication Standard (HCS) was expanded in scope in 1988 to cover all employers, including health care professionals. Employers must develop, implement, and maintain a written Hazard Communication Program (HCP). The HCP must describe how the employer plans to meet the requirements of HCS, list haz-

ardous chemicals known to be present in the workplace, and describe the employer's method of informing employees of hazards.

Optometric practices that have optical labs that do lens surfacing, edging, coating, tinting, or chemical hardening are likely to use chemicals considered hazardous. If so, your practice must comply with the OSHA requirement to provide information and training for employees who work in the lab in order to avoid or reduce their risk of exposure. To comply with the standard, try these basic steps:

Determine what hazardous chemicals are used in the office. Do an inventory of all chemicals used in your lab or other areas of the office, including disinfecting and cleaning compounds. Information

A HAZARDOUS COMMUNICATION PROGRAM

(SAMPLE OUTLINE)

Section 1: Purpose

State your office policy for providing a safe workplace and the purpose of the Hazard Communication Program.

Section 2: Chemical inventory

Identify and list all hazardous chemicals used in your office.

Describe the procedure that will be used to maintain and update this list as new products are purchased or used.

Section 3: Material Safety Data Sheet file

Include copies of the MSDSs for all hazardous chemicals listed in Section 2.

Describe the procedure that will be used to assure that new or updated MSDS are added when available.

Section 4: Chemical labeling

Describe the procedure that will be used to assure that all containers of hazardous chemicals are properly labeled with the identity of the chemical and the appropriate hazard warning.

Section 5: Training

Explain the procedure that will be used in teaching employees the proper use and handling of chemicals.

Maintain training records for each employee, including the date on which training was conducted, and the name and signature of the person trained.

as to whether chemicals are hazardous can be found on warning labels on chemical containers and/or in Material Safety Data Sheets (MSDSs) supplied by the manufacturers.

Warning labels are designed to alert users that a chemical is dangerous. Labels must identify all the hazards of the material, but they might not tell you everything you need to know about controlling those dangers. The MSDSs will give you more detailed information.

An MSDS should be provided to you when chemicals are first purchased, or you can request a copy directly from the manufacturer (see Figure 2).

Among the potentially hazardous chemicals found in an optical lab are acetone, adhesive remover (methyl ethyl ketone), edge polish (methylene chloride), chemical tempering salts (sodium nitrate, potassium nitrate), lens cleaner (potassium hydroxide), and plastic lens tinting dyes.

FIGURE 1

If, after reviewing the chemicals used in your office, you determine that any are potentially hazardous to health, you must develop and implement a Hazard Communication Program (HCP) for your practice.

Develop a Hazard Communication Program. A HCP should list all the known hazardous chemicals in the workplace, tell how employees will be informed of the hazards, and describe how employee training will be provided.

You will need to develop a plan tailored to meet your specific needs. Whatever plan you develop must be in writing and must be available for employee review. An outline of a sample Hazard Communication Program is shown in Figure 1. It should be typed on your office letterhead and maintained on file.

Train employees. All employees who routinely come in contact with hazardous chemicals will need to be given training in how to work with them safely. The training program should discuss the potential hazards of all chemicals in the work area. Topics to be included are:

- How the Hazard Communication Program is implemented in your office
- How to read and interpret information on labels and MSDSs
- The potential hazards of known chemicals used in your office
- Measures employees can take to protect themselves from these hazards, including the use of personal protective equipment

FIGURE 2

- Methods and observations, such as visual appearance or smell, that workers can use to detect the presence of a hazardous chemical

LOSING MY RELIGION

For several years I had suggested to one patient that he obtain trifocals. Each time I was rebuffed by his most adamant reply: "I do not want any trifocals."

During his last visit he announced, "Well, you'd better give me trifocals." Taken aback, I asked what made him change his mind.

"I sing solo in a church choir," he said. "The last time I sang, I took a step back for dramatic presentation, and realized I couldn't see my music either through the top or bottom of my glasses. I started to get flustered, and tried to keep my place, but the notes just became all jumbled. I stood there in front of the congregation, and for some reason sang out, '... and there is no God!'"

"The choir was devastated, but half the congregation was asleep and didn't realize anything was wrong. However, they won't let me sing again until I get trifocals."

—Arnold Bierman, O.D.
Lansdale, PA

Material Safety Data Sheet		U.S. Department of Labor			
May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.		Occupational Safety and Health Administration (Non-Mandatory Form) Form Approved OMB No. 1218-0072			
Identity (As used on label and list)		BPI Lens Soap (TM)			
Section I					
Manufacturer's Name: Brain Power Incorporated (BPI)		Emergency Telephone Number (305) 264-4465			
Address: 4470 SW 74 Avenue, PO Box 599501		Telephone Number for Information (305) 264-4465			
Miami, Florida 33255-9501, USA		Date Prepared 26 July 1990			
		Signature of Preparer (Optional)			
Section II - Hazardous Ingredients/ Identity Information					
Hazardous Components	Specific Chemical Identity, Common Name(s)	OSHA PEL	ACGIH TLV	Other Limits	% Optional
Trade secret surfactants		Not established	Not established		
All other ingredients not listed are proprietary and are not known to be hazardous.					
Section III - Physical/Chemical Characteristics					
Bolling Point	No Data	Specific Gravity (#20=1)	No Data		
Vapor Pressure (mm Hg)	No Data	Melting Point	No Data		
Vapor Density (AIR=1)	No Data	Evaporation Rate (Butyl Acetate=1)	No Data		
Solubility in Water	Soluble				
Appearance and Odor	Orange milky dispersion. Mild mintgreen odor.				
Section IV - Fire and Explosion Hazard Data					
Flash Point (Method Used)	Not determined	Flammable Limits	Not determined	LEL	No data
Extinguishing Media	Water fog, dry chemical, foam, carbon dioxide.				
Special Fire Fighting Procedures	Wear self-contained breathing apparatus, face shield, and protective clothing to avoid contact.				
Unusual Fire and Explosion Hazards	None known.				
(Reproduce locally)					Page One of Two
<p>The information contained herein is based on data believed by Brain Power Inc. to be accurate, but we do not assume any liability for the accuracy of this information. We neither suggest nor guarantee that any hazards mentioned are the only ones which exist. Anyone intending to rely on any recommendation or to use any equipment, technique or material mentioned should also satisfy himself that he can meet all applicable safety and health standards. Determination of the suitability of any information or product for the use contemplated by any user, the manner of that use and whether there is any infringement of patents is the sole responsibility of the user. No significant environmental effects are known as formulated. As chemical use restrictions become more severe and product hazards are more thoroughly investigated, BPI will continue the effort to replace and/or avoid the use of hazardous materials. Where they are known and as more materials are added to the hazardous lists we will continue to work diligently to replace them. All data and information provided as of this date of preparation as per form OSHA "Right to know" regulation 29 CFR 1910.1200 is done in good faith without warranty of accuracy or completeness. Conditions of use are often beyond our control and BPI disclaims liability for hazards connected with the use, mishandling or abuse of this material. BPI further offers no warranty of the results obtained through the use of this product. This information is provided solely for your consideration and evaluation.</p>					

The precautions that may be needed include gloves and splash-proof chemical goggles to avoid eye and skin contact, working in well-ventilated areas, and keeping containers of chemicals closed when not in use.

Copies of the complete OSHA Hazard Communication Standard (29 CFR 1910.1200) can be obtained from any OSHA regional office or the OSHA Publications Office, Room N3101, Washington, DC 20210 (phone [202] 523-9667).

There is no charge for a single copy.

While not every optometric practice will have to comply with these regulations, it is worthwhile to routinely review the chemicals used in your practice to determine if any are potentially hazardous to employees. Sensible guidelines for storage and use of all chemicals in your office will help to ensure a safe and healthy work environment.

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