

ANSI Z129.1-2006

# American National Standard

*for Hazardous Industrial Chemicals –  
Precautionary Labeling*

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**Z129.1-2006**  
(Revision of  
ANSI Z129.1-2000)

American National Standard  
for Hazardous Industrial Chemicals –  
Precautionary Labeling

Sponsor

**American Chemistry Council**

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**American National Standards Institute, Inc.**

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**Foreword** (This foreword is not part of American National Standard ANSI Z129.1-2006.)

ANSI Z129.1-2006, American National Standard for Hazardous Industrial Chemicals - Precautionary Labeling was developed by a technical committee of the American Chemistry Council (ACC) and was submitted for approval under ACC's ANSI-approved canvass method operating procedures.

The need for consistent precautionary labeling was recognized in 1944, when the Manufacturing Chemists Association (which later became the Chemical Manufacturers Association [CMA] and then the American Chemistry Council [ACC]) established the Labels and Precautionary Information (LAPI) Committee. The LAPI Committee developed the first published industry guide to precautionary labeling for hazardous chemicals titled "A Guide for the Preparation of Warning Labels for Hazardous Chemicals" or Manual L-1. The first edition of Manual L-1 was published in 1945 and was followed by six revisions. To broaden review of the document, the Manual L-1 was converted to the current American National Standard in 1976 (ANSI Z129.1-1976). Since then, the Standard has undergone five revisions - 1982, 1988, 1994, 2000 and 2006.

Most of the changes made to the 2006 edition of the Standard are organizational, rather than substantive, in nature. Revisions were made to improve clarity, readability and consistency. Several annexes were partially incorporated into the text of the Standard, and all remaining annexes were revised and updated.

This standard contains four annexes, all of which are informative and are not considered part of the standard.

Suggestions for the improvement of this standard are welcome and will be considered for subsequent revisions. They should be addressed to the American Chemistry Council, 1300 Wilson Boulevard, Arlington, VA 22209.

The following organizations, recognized as having an interest in the standardization of precautionary labeling of industrial chemicals, were contacted prior to the approval of this standard. Inclusion in this list does not necessarily imply that an organization concurred with the version of the proposed Standard submitted to ANSI

Aerospace Industries Association  
AFL-CIO  
Air and Waste Management Association  
Air Conditioning Contractors of America, Inc.  
American Academy of Clinical Toxicology  
American Association of Occupational Health Nurses  
American Association of Poison Control Centers  
American Chemical Society  
American Dental Assn.  
American Electronics Association  
American Feed Industry Association.  
American Fiber Manufacturers Association  
American Forest & Paper Association  
American Industrial Hygiene Association  
American Institute of Chemical Engineers (AIChE)  
American Iron & Steel Institute  
American Petroleum Institute  
American Public Health Association  
American Supply Association  
American Trucking Associations  
Argonne National Laboratory  
Asphalt Roofing Manufacturers' Association  
ASTM E34.40 Haz Com  
Automotive Industry Action Group  
Canadian Chemicals Producers' Association

Canadian Labour Congress  
Chemical Abstracts Service  
Chemical Producers & Distributors Association  
Chemical Safety & Hazard Investigation Board  
CIIT Centers for Health Research  
Color Pigments Manufacturers Association  
Compressed Gas Association  
Consumer Specialties Product Association  
Cosmetic, Toiletry & Fragrance Association  
CropLife America  
Data Interchange Standards Association  
Defense Supply Center  
Edison Electric Institute  
Environmental Protection Agency  
ETAD North America  
FM Global  
Dangerous Goods Advisory Council  
Hexion Specialty Chemicals, Inc.  
Independent Lubricant Manufacturers Association  
Industry Canada  
International Association of Fire Chiefs  
International Association of Fire Fighters  
International Chemical Workers Union Council  
International Institute of Synthetic Rubber Producers  
International Sanitary Supply Association  
MDL Information Systems, Inc.  
National Association of Chemical Distributors  
National Association of Emergency Medical Technicians  
National Association of Homebuilders  
National Association of Printing Ink Manufacturers  
National Association of Scientific Materials Managers  
National Automobile Dealers Association  
National Elevator Industry, Inc.  
National Institute of Environmental Health Sciences  
National Institute of Standards and Technology  
National Paint & Coatings Association  
National Petrochemical & Refiners Association  
National Safety Council  
National Toxicology Program  
Healthcare Distribution Management Association  
Naval Supply Systems Command  
North American Insulation Manufacturers Association  
Organizational Resource Counselors  
Pharmaceutical Research and Manufacturers of America  
Printing Industries of America  
Roof Coatings Manufacturers Association  
Rubber Manufacturers Association  
Screenprinting & Graphic Imaging Assoc. International  
Semiconductor Safety Association  
Society for Chemical Hazard Communication  
Society of American Florists  
Society of the Plastics Industry  
Society of Toxicology  
Synthetic Organic Chemical Manufacturers Association  
The Adhesive and Sealant Council, Inc.  
The American Society of Safety Engineers  
The Soap and Detergent Association  
The Sulphur Institute  
The Weinberg Group  
U.S. Consumer Product Safety Commission  
U.S. Coast Guard  
U.S. Dept. of Transportation  
US General Services Administration  
WHS Consulting LLC  
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American National Standard

# Hazardous Industrial Chemicals – Precautionary Labeling

## 1 Introduction

The development of new chemicals, the re-evaluation of existing chemicals, and the ever-widening use of chemicals and chemical processes in a variety of applications have accentuated the need to provide information to people who use, handle or store hazardous industrial chemicals. The dissemination of this information includes appropriate precautionary statements that are expressed as simply and briefly as possible on labels affixed to containers of hazardous chemicals and in other written material provided for the guidance of industrial users. Precautionary labeling communicates this information through appropriate precautionary statements in a manner that is accurate, clear and concise.

## 2 About the Standard

For purposes of this Standard, the term “chemical” includes a single chemical substance or a mixture of substances. A **label** is the display of written, printed, or graphic matter, which is intended to provide information and which is affixed to, printed on, or attached to the immediate chemical container, as well as any outside packaging. The term **labeling** as used in this Standard includes container labels and other documents that contain precautionary and hazard communication information. These other documents include product literature, technical brochures, material safety data sheets (MSDSs), training materials, process standards and other communications.

The term **precautionary labeling** includes hazard warning statements and other precautionary statements. Precautionary labeling is not intended to include all information on the properties and hazards of the chemical or the complete details of its handling under all conditions. **The precautionary labeling used may not necessarily be identical from one document type to another, but it must always be consistent.**

### 2.1 Scope

This Standard establishes sound principles and guidelines for the preparation of precautionary labeling for hazardous industrial chemicals. The Standard must be applied in a manner consistent with all statutory and regulatory requirements, including the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS; 29 CFR 1910.1200) and the substance specific standards (29 CFR 1910.1001-1052). This Standard is not intended to provide a rote specification for complying with the HCS or any other government requirements.

Some or all elements of this Standard may be applicable in preparing permissible, alternative workplace chemical labeling approaches, such as stationary process containers and portable containers (29 CFR 1910.1200(f)(7) and (8) respectively). However, this Standard is not intended to address these specific labeling issues.

There are use-specific statutory and regulatory requirements for consumer (Federal Hazardous Substances Act [FHSA]), medical (Federal Food, Drug and Cosmetic Act [FFDCA]), and pesticide (Federal Insecticide, Fungicide and Rodenticide Act [FIFRA]) products, as well as materials in transportation (Department of Transportation [DOT] Hazardous Materials Regulations). There are other federal and state regulations that may contain precautionary labeling requirements. For example, state and local governments may regulate labeling through statutes, including “Right-to-Know” laws. It is not the intent of the Standard to substitute for these requirements or to list each and every unique requirement.

This Standard is not intended to address or incorporate other alternative industry labeling methods, such as the National Paints and Coatings Association’s Hazard Material Information System (HMIS® III) or the National Fire Protection Association’s (NFPA) NFPA 704 Standard System for the Identification of Hazards of Materials for Emergency Response.

Precautionary labeling requirements and definitions are subject to change. It is the responsibility of the label preparer to be aware of current regulatory requirements and/or other guidelines. Where there is a conflict between the applicable regulations and this Standard, the regulations must take precedence over this Standard. References to the Code of Federal Regulations (CFR) in the Standard are to the CFR available as of January 1, 2005.