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# U.S. CONSUMER PRODUCT SAFETY COMMISSION



## Office of Compliance

### Requirements<sup>1</sup> under the Federal Hazardous Substances Act: Labeling and Banning Requirements for Chemicals and Other Hazardous Substances 15 U.S.C. § 1261 and 16 C.F.R. Part 1500

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#### ***What is the purpose of the Federal Hazardous Substances Act (FHSA) requirements for chemicals and other hazardous substances?***

The FHSA requires precautionary labeling on the immediate container of hazardous household products to help consumers safely store and use those products and to give them information about immediate first aid steps to take if an accident happens. The Act also allows the Consumer Product Safety Commission to ban certain products that are so dangerous or the nature of the hazard is such that the labeling the act requires is not adequate to protect consumers.

#### ***Where can I find the requirements for chemicals and other hazardous substances?***

The FHSA is in Title 15 of the United States Code, starting at section 1261. Rules that tell you the requirements of the act, how to determine whether a product requires labeling, what labeling is required for specific products, and what products are banned are published in the Code of Federal Regulations in Title 16, Part 1500. Because the Commission may add new rules from time to time, we recommend that you periodically check for new or revised rules in the Code of Federal Regulations. You can obtain the regulations issued under the Federal Hazardous Substances Act, 16 C.F.R. Part 1500, and any other regulations referenced in this summary from the Commission's Web Site at: <http://www.cpsc.gov>.

#### ***How do I determine whether a product requires labeling?***

First, the FHSA only covers products that, during reasonably foreseeable purchase, storage, or use, may be brought into or around a place where people live. Products used or stored in a garage, shed, carport, or other building that is part of the household are also covered.

The Act requires hazardous household products ("hazardous substances") to bear labeling that alerts consumers to the potential hazards that those products present and that tells them what they need to do to protect themselves and their children from those hazards. Whether a product must be labeled depends on its contents and the likelihood that consumers will be exposed to any hazards it presents.

To require labeling, a product must first be toxic, corrosive, flammable or combustible, an irritant, or a strong sensitizer, or it must generate pressure through decomposition, heat, or other means. Second, the product must have the potential to cause substantial personal injury or substantial illness during or as a result of any customary or reasonably foreseeable handling or use, including reasonably foreseeable ingestion by children.

#### ***How can I find out whether a product presents one of the hazards listed above?***

Each of the hazards above has a specific definition in the FHSA. Where it is appropriate, regulations issued under the Act specify the tests to perform to evaluate a product for a specific hazard. The definitions and

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<sup>1</sup> This document is a general unofficial summary of the requirements of the Federal Hazardous Substances Act that apply to chemicals and other hazardous substances. It does not replace the requirements of the act itself at 15 U.S.C. § 1261, *et seq.*, or the regulations published in 16 C.F.R. Part 1500. This summary does not include all of the details included in those requirements, particularly those involved in testing products to determine whether they require labeling to address specific hazards. (This does not cover the FHSA as it applies to toys and other articles intended for use by children that present thermal, electrical, or mechanical hazards.) For those details, please refer to the regulation or contact the Office of Compliance.

citations to the appropriate tests are below. All of the references are available from the Commission's web site at: <http://www.cpsc.gov>. under the "Business" icon. In evaluating a product, you should make sure to consider the finished product that consumers will use, rather than its individual ingredients.

- (1) A product is toxic if it can produce personal injury or illness to humans when it is inhaled, swallowed, or absorbed through the skin. 16 CFR 1500.3(c)(1) and (2) contain certain tests on animals\* to determine whether a product can cause immediate injury. In addition, a product is toxic if it can cause long term chronic effects like cancer, birth defects, or neurotoxicity. 16 CFR 1500.3(c)(2)(ii) and 1500.135 tell you how to evaluate products for chronic hazards.
- (2) A product is corrosive if it destroys living tissue such as skin or eyes by chemical action. Tests\* for corrosivity are at 16 CFR 1500.41.
- (3) A product is an irritant if it is not corrosive and causes a substantial injury to the area of the body that it comes in contact with. Irritation can occur after immediate, prolonged, or repeated contact. Tests\* for skin and eye irritation are at 16 CFR 1500.41 and 1500.42, respectively.
- (4) A strong sensitizer is a product that the Commission declares by regulation has a significant potential to cause hypersensitivity. That hypersensitivity does not happen when a person first comes in contact with the product, and only becomes evident after the person has been exposed to the product for a second time. 16 CFR

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\* A general note on animal testing. The FHSA only requires that a product be labeled to reflect the hazards it presents. It does not **require** anyone to perform animal tests. The Commission policy is, whenever possible, to evaluate product hazards by using alternatives to animal testing. We encourage anyone evaluating products to determine whether they present hazards listed in the FHSA to follow a similar policy.

Since the FHSA directs that reliable human experience data take precedence over differing results from animal tests, we first look to records of prior human experience with specific products, if such records exist. Other alternative sources of information we research include literature that records the results of prior animal testing or the results of limited human tests, and expert opinion. We use animal testing only when the other information sources have been exhausted, and, if such testing is necessary, limit those tests to the lowest possible number of animals, taking every possible step to eliminate or reduce the pain or discomfort that can be associated with such tests. (FR Vol. 49, No. 105, 6/30/84)

1500.13 lists the products that the Commission has classified as strong sensitizers.

- (5) The flammability of a product depends on the results of testing. 16 CFR 1500.3(c)(6) defines the terms "extremely flammable", "flammable", and "combustible" as they apply to liquids, solids, and the contents of self-pressurized containers like aerosol cans. For example, a flammable liquid can be:
  - a. Extremely flammable if, when tested, it has a flash point at of below 20° Fahrenheit (F.),
  - b. Flammable if it has a flash point above 20° F. and below 100°F., or
  - c. Combustible if it has a flash point at or above 100° F. up to and including 150° F.Please consult 16 CFR 1500.3(c)(6) for exceptions to these limits.

Solid and self-pressurized products can be either extremely flammable or flammable. Please refer to 16 CFR 1500.3(c)(6)(v)-(vii) for these definitions.

16 CFR 1500.43 and 43(a) contain the basic tests for the flammability of liquids and similar products. The procedure for testing solid materials appears in 16 CFR 1500.44, while 16 CFR 1500.45 and 46 specify the procedures to use to test the contents of self-pressurized containers.

- (6) Products that generate pressure, through decomposition, heat, or other means include aerosols, fireworks that contain explosive powder, and certain pool chemicals that, when their containers are heated by sunlight, for example, start to react and generate pressure in the containers. The FHSA does not have any tests to determine the amount of pressure that these types of products might generate.

***Are there any guidelines that I can use to evaluate exposure to a product and the risk of injury it may present?***

There are no formal guidelines. However, among the things to consider are:

- (1) How the contents and form of the product might cause an injury,
- (2) the product's intended handling, use, and storage, and
- (3) any accidents that might foreseeably happen during handling, use, or storage that could hurt the purchaser, user or others, including young children who might get into the package of the product.

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***What information must I put on the package of a product that is hazardous?***

The label on the immediate package of a hazardous product, and any outer wrapping or container that might cover up the label on the package, must have the following information in English:

- (1) The name and business address of the manufacturer, packer, distributor, or seller;
- (2) The common or usual or chemical name of each hazardous ingredient;
- (3) The signal word “Danger” for products that are corrosive, extremely flammable, or highly toxic;
- (4) The signal word “Caution” or “Warning” for all other hazardous products;
- (5) An affirmative statement of the principal hazard or hazards that the product presents, for example, “Flammable”, “Harmful if Swallowed”, “Causes Burns”, “Vapor Harmful”, etc.;
- (6) Precautionary statements telling users what they must do or what actions they must avoid to protect themselves;
- (7) Where it is appropriate, instructions for first aid treatment to perform in the event that the product injures someone;
- (8) The word “Poison” for a product that is highly toxic, in addition to the signal word “Danger”;
- (9) If a product requires special care in handling or storage, instructions for consumers to follow to protect themselves; and
- (10) The statement “Keep out of the reach of children”.

If a hazardous product such as a plant does not have a package, it still must have a hang tag that contains the required precautionary information. That information must also be printed in any literature that accompanies the product and that contains instructions for use.

***Are there any guidelines describing how to make sure that the label of a hazardous product is conspicuous?***

Yes. The FHSA requires that all of the safety information about hazardous products must be located prominently on the label and must be in conspicuous and legible type in contrast by typography, layout or color with the other printed information on the label.

The regulation at 16 CFR 1500.121 contains guidelines to use to make sure that the information the act requires appears prominently and conspicuously on the label of a hazardous substance. For example, the signal word and statement of hazard must appear on

the surface of the immediate container of the product that has the labeling designed to be most prominently shown to or examined by consumers when they shop at retail. The remainder of the labeling may appear elsewhere on the package, as specified in the regulation. The regulation also covers a variety of other topics such as type size and style, color contrast, and special rules for tubes, unpackaged hazardous products, and accompanying literature. Please consult the regulation for details.

Other regulations (16 C.F.R.1500.122 - .134) cover topics such as condensing information on the label, how to label products with multiple hazards, the deceptive use of disclaimers on a label, the use of the signal word “Poison” on certain corrosive products, the Commission’s policy that first aid instructions should not recommend inducing vomiting by using a solution of salt water, and labeling for literature that accompanies a hazardous substance. These regulations also contain examples of the appropriate labels for self-pressurized containers and extremely flammable contact adhesives.

***Will the Commission design a label for my product?***

No. That is the responsibility of the person who manufactures or sells a product for household use. However, the Commission will provide you with informal comment on a label that you propose to use as long as you provide:

- (1) the complete or proposed label,
- (2) complete quantitative formula.
- (3) adequate pharmacological, toxicological, physical, and chemical data that may be relevant to the possible hazards that the product may present, and
- (4) any additional information that would assist us in evaluating the proposed label. This could include complaints of injury, information about how consumers may use the product, and recommendations obtained from poison control centers or physicians about the appropriate first aid treatment to administer if the products is swallowed or otherwise involved in an incident.

***Are there any chemical products that are so dangerous that they are banned from sale?***

Yes. The FHSA allows the Commission to ban a hazardous substance if the Commission determines that the product is so hazardous that the cautionary labeling required by the act is not adequate to protect the public.

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The Commission has banned the following products:

- (1) Extremely flammable water repellents for use on masonry walls and floors inside homes;
- (2) Carbon tetrachloride and mixtures containing it;
- (3) a. Aerial fireworks devices that create an audible effect through a charge of more than 2 grains of pyrotechnic material;  
b. firecrackers that produce an audible effect through a charge or more than 50 mg. (.772 grains) of pyrotechnic material; and  
c. other fireworks devices that do not meet the general performance requirements of 16 C.F.R. 1507.  
Kits and components used to produce the banned fireworks are also included in the ban. Pest control devices are not.
- (4) Liquid drain cleaners that contain 10% or more by weight of sodium or potassium hydroxide and that are not packaged in child-resistant packaging. See 16 C.F.R. 1700 for the child-resistant packaging requirements;
- (5) Products containing soluble cyanide salts;
- (6) General- use garments containing asbestos;
- (7) Self-pressurized products that contain vinyl chloride monomer as an ingredient or in the propellant;
- (8) Reloadable tube aerial shell fireworks devices that use shells wider than 1.75 inches.

Please refer to 16 C.F.R. 1500.17 for the details of and exceptions to each specific ban

***Are there any other products that are banned?***

Yes. Any toy or other article that is intended for use by children and that contains a substance that presents one of the hazards discussed above is also banned

under the FHSA if a child can gain access to the substance. 16 C.F.R. 1500.85 contains a number of exceptions to this general banning provision.

***Are there any other regulations covering hazardous chemical products that I should know of?***

Yes, 16 C.F.R. 1500.14 has special labeling requirements for ethylene glycol, diethylene glycol, benzene, toluene, xylene, petroleum distillates, turpentine, methyl alcohol, charcoal, fireworks devices, and art materials that present a risk of chronic toxicity.

In addition, under the Consumer Product Safety Act, the Commission has banned:

- (1) Certain extremely flammable contact adhesives (16 C.F.R. 1302);
- (2) Paint and other surface coatings containing more than .06% lead, and furniture, toys, and other articles intended for use by children that are coated with such paint (16 C.F.R. 1303); and
- (3) Consumer patching compounds and artificial ashes and embers used in fireplaces containing free-form asbestos that can be inhaled (16 C.F. R. 1304 and 1305).

The Commission has also issued labeling requirements for aerosol products that contain chlorofluorocarbons warning that the substance may harm health and the environment by reducing the ozone in the upper atmosphere (16 C.F.R. 1401).

***Where can I find additional Information?***

For more information on the requirements contact the Consumer Product Safety Commission, Office of Compliance, Washington, D.C. 20207, telephone: (301) 504-7913, <mailto:sect15@cpsc.gov>.

