

THE FLINN CHEMICAL SAFETY LABEL SOLVES CHEMICAL PROBLEMS

The FLINN chemical safety label has been specifically designed to fit the needs of the junior/senior high school science teacher. How should I properly store my chemicals? What safety aids should be available to me when using the chemical? How toxic is toxic? What is the shelf life of the chemical? How do I safely dispose of the chemical? Is the chemical hazardous? These questions plus many more are answered by the Flinn chemical safety label.

AT-A-GLANCE CHEMICAL SAFETY GUIDE™

HEALTH	FLAMMABILITY	REACTIVITY	EXPOSURE	STORAGE
3	0	2	3	3
RADICAL	NONE	CONSIDERABLE	RADICAL	CABINET
				
		ROOM VENT	HOOD	

DANGER! Severely corrosive to all body tissues. Highly toxic by ingestion. Avoid contact with skin, eyes and mucous membranes. Avoid contact with oxidizing agents. Contact with metals may produce hydrogen and a possible explosion. Use only under a fume hood. Fumes are a severe respiratory hazard. TLV: 5 ppm.

FIRST AID: External: Flush affected area with water. Internal: See a physician at once. Eyes: Flush with water for 15 minutes. See a physician.

© 2011 Flinn Scientific, Inc.
Batavia, IL 60510 U.S.A.

1 Product Name, Quality, Concentration, etc.

Full chemical name is shown and sometimes a common alternative name. The chemical formula and formula weight is immediately below the name. The quality of the substance (e.g., reagent, laboratory grade, etc.) is clearly indicated. See page 25 of this catalog for quality or grade explanations.

2 Hazard Alert

Hazard data is provided to alert the science teacher to the hazardous character of each chemical. This information could prove helpful when you are storing, dispensing, or using the product.

3 Large Hazard Warning

A large, brief and specific hazard warning is shown. Many substances have multiple hazard characteristics, e.g., corrosive and inhalation irritant. This single line and dominant warning restates the most hazardous nature of the substance.

4 At-A-Glance Chemical Safety Guide™

The At-A-Glance Guide™ provides a numerical guide (3 most hazardous; 0 little hazard) in five categories: health, flammability, reactivity, human exposure and storage. In addition to the guide, through the use of pictorials, alerts the teacher about safety aids that are suggested to be available when handling this substance: e.g., gloves, goggles, apron, etc.

5 Warning Information

Warning information is concise and easy to understand. The warnings provided are an extension of the safety information provided in the hazard alert. Specific warnings, conditions to avoid, toxicity levels, incompatibility, plus other safety information is provided.

6 First Aid

We have provided basic first aid recommendations, but always suggest you seek professional medical assistance whenever injury takes place in the laboratory.

7 Lot Number

The fingerprint of the chemical you have purchased. A series of numbers which identifies for Flinn Scientific what the chemical is, how it was packaged, when it was packaged, who the chemical manufacturer is, etc. Lot numbers are a very important part of any chemical label!

8 Flinn Storage Method/Number

Numbers refer to the compatible chemical family in which this item should be stored. For example: Inorganic #9 refers to the family that includes all inorganic acids except for nitric acid. A detailed table of these families and even their most compatible shelf order will be found on pages 1170–1171 of this *Flinn Scientific Catalog/Reference Manual*. Please refer to those reference pages.

FLINN SCIENTIFIC INC.**"Your Safer Source for Science Supplies"****H0006****2.5 liters****HYDROCHLORIC ACID**ACS reagent, 12 Molar, assay 37%,
HCl, F.W. 36.46, PVC coated**★HAZARD ALERT:** Highly toxic by ingestion
or inhalation; severely corrosive to skin and eyes.**CORROSIVE TO BODY TISSUE****7 LOT: 1 2 5 3 4****8 STORAGE:** Inorganic #9 in a dedicated acid cabinet. If an acid cabinet is not available store in a Flinn *Saf-Cube*®. This product continuously fumes—particularly in a warm, moist environment. This substance is singly responsible for destroying many school storage shelves and cabinets. The product deserves special storage attention.**9 INORGANIC #9 I****10 DISPOSAL:** #24b**11 SHELF LIFE:** Good if stored safely.**12 SOLUBLE:** Water.**13 CAS NO:** 7647-01-0**14 UN1789****9 Storage Method/Number, Enlarged**

The Flinn compatible family storage number is enlarged so you can easily locate and return the chemical container to its proper storage location.

10 Suggested Disposal Method

Suggested disposal techniques for small, laboratory quantities of chemicals are provided in this *Flinn Scientific Catalog/Reference Manual* on pages 1174–1203. The number shown in the chemical listing refers you to a specific and suggested disposal method for that particular product.

11 Shelf Life

A general statement about anticipated shelf life. Since conditions vary widely, the statement is general and should be accepted in that context. The shelf life data are based on exhaustive literature searches.

12 Soluble

In what solvent(s) is this substance soluble? We have listed the common solvents. Limited space may, in a few cases, prevent us from listing all of the possible solvents.

13 Chemical Abstract Service Registry Number (CAS)

CAS means Chemical Abstract Service. The CAS is operated by the American Chemical Society (ACS), a society of professional chemists. The CAS maintains resource information on thousands and thousands of chemicals. The CAS number is the single identifying number for each specific substance.

14 UN Number

The UN (United Nations) number is a worldwide identifying number for a substance in commerce or transport. This number is meaningful to shippers and hazardous material handlers.

15 NFPA Code

To protect the professional firefighter, NFPA (National Fire Protection Association) has established a numerical code that rates chemicals *under fire conditions* in four categories: health, flammability, reactivity and unusual reactivity. Within each category a numerical rating system has been established in five numerical ratings (0–4). Number 4 is a severe hazard and number 0 is no special hazard. This rating system is on our label because a few state laws require it. Unfortunately, the NFPA numerical ratings exist for a very limited number of chemicals and the numbers represent hazard *under fire conditions* as opposed to normal laboratory use. This “under fire conditions” rating system tends to distort hazard characteristics. We urge teachers to depend more on our At-A-Glance Guide and our safety pictorials shown elsewhere on each label.

16 Date Labeling

Every substance is date labeled. Date labeling was pioneered by Flinn. The science teacher and his/her successors are assured that the age of chemicals purchased from Flinn are not a mystery.