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.







DANGER! Highly flammable liquid and vapor. Ground or bond container and receiving equipment. May be fatal if swallowed and enters airways. Causes skin and serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

FIRST AID: IF SWALLOWED: Rinse mouth.Contact POISON CENTER or physician if you feel unwell. IF ON SKIN: Flush affected area with water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present, and continue rinsing.

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FLINN SCIENTIFIC INC.

"Your Safer Source for Science"

T0019

500 mL

OTOLUENE

reagent, toluol, C₆H₅CH₃, F.W. 92.14

★ HAZARD ALERT: Highly flammable liquid and vapor. Keep away from heat, sparks, and open flames. Keep container cool and tightly closed. Obtain special instructions before use. Do not use until all safety precautions have been read and understood. Wear gloves, eye and face protection. Wash thoroughly after handling.

IN CASE OF FIRE: Use triclass dry chemical fire extinguisher.



8 LOT: 12534

STORAGE: Organic #3 in a dedicated flammables cabinet. If a flammables cabinet is not available store in a Flinn *Saf–Stor* Can.

ORGANIC #3



11 DISPOSAL: #24b

12 SHELF LIFE: Good if stored safely.

13 SOLUBLE: Water.
14 CAS NO: 108-88-3

CAS NO: 10



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PURCHASED 2016

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 27 of this catalog for quality or grade explanations.

2 Hazard Alert

Hazard and safety precaution information is provided to alert the science teacher to the hazardous character of each chemical. This information is 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 Hazard Pictograms

Graphical pictures with characteristic symbols to convey specific hazard information. There are eight pictograms. See page 1238 for more information about pictograms.

5 Signal Word

Indicates the relative severity of a hazard and alerts the reader to potential hazards. The GHS signal words are "Danger" or "Warning," with "Danger" being the more severe.

6 Warning Information

This section contains Hazard and Precautionary Statements. Hazard Statements are assigned based on a hazard class and category to describe the hazards of a product. Precautionary statements describe recommended measures that should be taken to minimize or prevent adverse effects from exposure to a hazardous product.

First Aid

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

8 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!

9 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 1264–1265 of this *Flinn Scientific Catalog/Reference Manual*. Please refer to those reference pages.

10 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.

11 Suggested Disposal Method

Suggested disposal techniques for small, laboratory quantities of chemicals are provided in this *Flinn Scientific Catalog/Reference Manual* on pages 1273–1298. The number shown in the chemical listing refers you to a specific and suggested disposal method for that particular product.

12 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.

13 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.

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.

15 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.

16 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 the hazard warnings, pictograms, and signal words shown elsewhere on each label.

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.