

**UNITED STATES DEPARTMENT OF LABOR**

*JAMES J. DAVIS, Secretary*

**BUREAU OF LABOR STATISTICS**

*ETHELBERT STEWART, Commissioner*

**BULLETIN OF THE UNITED STATES } . . . . No. 512**  
**BUREAU OF LABOR STATISTICS }**

**SAFETY CODE SERIES**

**CODE FOR IDENTIFICATION  
OF GAS-MASK CANISTERS**

**NATIONAL SAFETY COUNCIL, SPONSOR**

**AMERICAN RECOMMENDED PRACTICE**

*Approved January 7, 1930*

**AMERICAN STANDARDS ASSOCIATION**



**MARCH, 1930**

**UNITED STATES  
GOVERNMENT PRINTING OFFICE  
WASHINGTON : 1930**

**For sale by the Superintendent of Documents, Washington, D. C. - - - Price 5 cents**



## PREFACE

1. This code of colors for gas-mask canisters was formulated by a committee which functioned under the procedure of the American Standards Association. The work was sponsored by the National Safety Council.

2. The personnel of the committee follows:

Name	Affiliation	Representing
Chairman, E. S. Beaumont <sup>1</sup>	Peoples Gas, Light & Coke Co., Chicago, Ill.	American Gas Association.
John Roach.....	New Jersey Department of Labor, Trenton, N. J.	Association of Governmental Officials in Industry of the United States and Canada.
S. H. Katz <sup>1</sup> .....	Chemical Warfare Service, Edgewood Arsenal, Edgewood, Md.	Chemical Warfare Service.
F. R. Davis <sup>1</sup> .....	Bullard-Davis (Inc.), 67 Wall Street, New York City.	Davis Emergency Equipment Co.
E. H. Kellogg <sup>1</sup> .....	Mine Safety Appliances Co., Brad-dock Avenue and Thomas Boule-vard, Pittsburgh, Pa.	Mine Safety Appliances Co.
J. M. Lewis, alternate.....	Mine Safety Appliances Co., Pitts-burgh, Pa.	Do.
C. A. Pense.....	Illinois Industrial Commission, 309 West Adams Street, Chicago, Ill.	International Association of Indus-trial Accident Boards and Com-missions.
B. Osborn, alternate.....	do.	Do.
Fred W. Sehl.....	Aetna Casualty & Surety Co., Hart-ford, Conn.	National Bureau of Casualty & Surety Underwriters.
C. E. Rice.....	Dow Chemical Co., Midland, Mich.	National Safety Council, Chemical Section.
B. F. Tillson.....	New Jersey Zinc Co., Franklin, N. J.	National Safety Council, Mining Section.
V. R. Currie.....	Texas Co., 17 Battery Place, New York City.	National Safety Council, Petroleum Section.
A. H. Nuckolls.....	Underwriters' Laboratories, 207 East Ohio Street, Chicago, Ill.	Underwriters' Laboratories.
A. F. Matson, alternate.....	do.	Do.
W. P. Yant.....	United States Bureau of Mines, Pittsburgh, Pa.	United States Bureau of Mines.
H. S. Norton.....	United States Bureau of Standards, Washington, D. C.	United States Bureau of Standards.
George K. Lewis.....	United Mine Workers of America, 209 American Federation of Labor Building, Washington, D. C.	United States Department of Labor.
Prof. Lester C. Lichty.....	Sheffield Scientific School, Yale University, New Haven, Conn.	American Society of Mechanical Engineers.
Secretary, R. H. Ferguson <sup>1</sup> ..	National Safety Council, 108 East Ohio Street, Chicago, Ill.	National Safety Council.

<sup>1</sup> Member of subcommittee.

### HANDLING CHANGES OR ADDITIONAL SUGGESTIONS

3. That suggestions for color changes or additional colors to be added to the code may be promptly handled, a committee, under the sponsorship of the National Safety Council, has been named. Any suggestions should be made to the secretary of the committee.

4. When gas-mask canisters are properly marked and labeled it is possible to determine definitely at a glance the contents of the canister and the protection which it affords. This code was designed to eliminate any confusion in the markings of the different manufacturers. By standardizing on the color markings it is a simple matter for a worker using a mask to know the proper canister which should be used in the atmosphere in which he must have protection.

5. This code deals only with the marking of canisters.



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# BULLETIN OF THE U. S. BUREAU OF LABOR STATISTICS

No. 512

WASHINGTON

MARCH, 1930

## CODE FOR IDENTIFICATION OF GAS-MASK CANISTERS

### PURPOSE

1. The purpose of this code is to provide protection against accidental injuries arising out of misunderstandings in the identification of suitable gas-mask canisters selected for use in connection with gas masks worn by men who are required to enter atmospheres containing dangerous quantities of harmful gases, vapors, smokes, or mists (singly or in combination) or dusts in combination with any of these. By establishing a uniform practice those who may have occasion to use gas masks will acquire a knowledge of the identification colors and marks and will thus be assisted as much as possible in selecting proper canisters for specific conditions encountered.

### SCOPE

2. The requirements of this code apply to the identification of all gas-mask canisters used to afford protection against harmful gases, vapors, smokes, and mists, also dusts in combination with any of these, whether in industrial plants, in mines, in connection with public utility operations, in rescue work, in fighting fires, or in any other similar endeavor, except as used in connection with military activities.

### APPLICATION

3. The manufacturers of gas-mask canisters falling within the scope of this code shall see that all canisters of their manufacture are properly colored and marked in accordance with these requirements before they are delivered to their customers.

4. All who issue or use gas masks falling within the scope of this code shall see that all gas-mask canisters purchased or used by them are properly colored and marked in accordance with these requirements before they are placed in service and that the colors and markings are properly maintained at all times thereafter until the canisters have completely served their purpose.

### COMPLIANCE

5. In the interest of safety and uniformity, compliance with this code is urged upon all manufacturers and users of gas-mask canisters.

## DEFINITIONS

**Gas mask.**

6. The words "gas mask" as used shall be understood to mean a device designed and constructed so that all air is excluded from the respiratory system of the wearer except that which is drawn through a canister forming a part of the gas mask.

**Canister.**

7. The word "canister" as used shall be understood to mean a container in which there are filtering, absorbing, adsorbing, neutralizing, or catalyzing materials capable of affording protection against harmful gases, vapors, smokes, and mists, singly or in combination, also dust in combination with any of these when used in connection with, or as part of, a gas mask.

## COLORS

8. Each gas-mask canister shall be given a distinctive color in accordance with the following:

Gases, vapors, smokes, or mists to be protected against	Distinctive color required
A. Acid.....	White.
B. Organic vapor.....	Black.
C. Ammonia.....	Green.
D. Carbon monoxide.....	Blue.
E. Acid and organic vapors.....	Yellow.
F. Acid and organic vapors and ammonia.	Brown.
G. Dusts, smokes, mists in combination with any of the above gases.	One-half inch contrasting black or white stripe.
H. All of the above gases.....	Red. Filters are included in this canister, but stripes to indicate them are unnecessary.
I. Other special gases.....	Color to be assigned.

NOTE.—This code was formulated through the cooperation of the National Safety Council, United States Bureau of Mines, and American Standards Association. These agencies will be glad to consider requests for additional color assignments for other possible gases or combinations if such gases assume importance in industry.

9. All colors used shall be such as to be clearly identified by the user and clearly distinguishable one from another. When more than one color is used there shall be a decided contrast between them.

10. The color coatings used shall offer a high degree of resistance to chipping, scaling, peeling, blistering, fading, and to the effects of chemical fumes, smokes, gases, moisture, and dusts in the ordinary atmospheres to which they may be exposed under normal conditions of storage and usage.



**MARKINGS OTHER THAN COLOR**

11. On each canister shall appear, in bold letters, a brief statement to show the purpose of the canister, for example:

FOR USE ONLY IN -----  
(Name of gas or gases)

FOR USE ONLY IN ----- AND IN DUSTS  
(Name of gas or gases)

FOR USE IN AIR CONTAINING ANY GAS OR SMOKE

12. For this purpose it is permissible to attach a metal plate bearing the proper inscription in raised or other distinct letters, or to stamp the statement into the metal of the canister with a male and female die. The statement may be marked with decalcomania, stenciled with paint, or paper labels may be used. The latter should be attached with heat-proof cement.

13. All of the markings specified above should be placed on the most conspicuous surface or surfaces of the canister.