W65 Self-Rescuer **Respirator**

MSA
The Safety Company

The W65 Self-Rescuer Respirator provides emergency respiratory protection against carbon monoxide gas resulting from under- ground fires or explosions. A one-time-use device for escape purposes only, it provides respiratory protection against carbon monoxide in otherwise respirable air; it should not be used in atmospheres containing less than 19.5 percent oxygen or in atmospheres containing other toxic gases and vapors.

The W65 Self-Rescuer uses oxidation Hopcalite® Catalyst to convert toxic carbon monoxide to non-toxic carbon dioxide. Filter unit consists of an outer course-dust filter and an inner fine-dust filter to remove dust particles, the Hopcalite Catalyst, and a drying agent to protect the catalyst from moisture. The respirator exceeds NIOSH specified service-life requirements of 60 minutes against 1% carbon monoxide in air 25˚ C, 95% RH, at a continuous flow rate of 32 liters per minute. Tests at 2% CO show that the W65 Self-Rescuer will still afford protection, but that increased reaction heat will eventually force the wearer to retreat to an atmosphere with a lower CO concentration. Heat buildup caused by the oxidation reaction is inherent in the operation of this type of self-recuer unit, but the W65 Self-Rescuer's integral heat exchanger reduces inhaled air temperature to a bearable level.

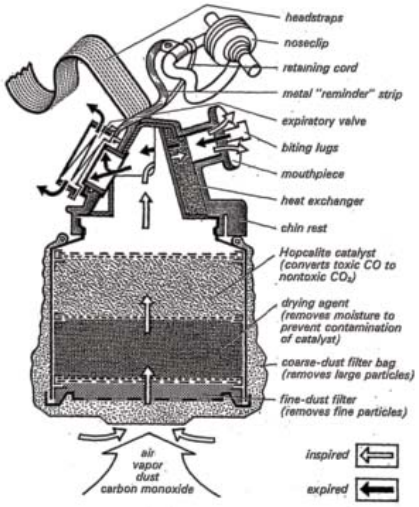
- Provides emergency protection against carbon monoxide gas resulting from underground fires or explosions
- Total life of 15 years with an in-service life limited to ten years
- Rugged stainless steel case
- Weighs only 2.2 lbs.

To protect the filter bed from moisture contamination, expired air is passed back through the heat exchanger and out through the spring-loaded mica disc expiratory valve. Excess saliva is also expelled through the expiratory valve.

Protected in a stainless steel case, the W65 Self-Rescuer has a positive hermetic seal and has a total life of 15 years, with an in-service life limited to ten years. In-service life starts when the unit is placed into a mine or underground for storage; however, if it has been used for emergency escape or if the seal is broken, it must be replaced with a new factory-sealed unit.

The entire assembly weighs approximately 1000 grams (2.2 lbs), and can be carried comfortably on the hip via a 1⅜" wide integral belt loop. An accessory leather or neoprene holster is available to adapt to belts up to 2½" wide.

MSA
The Safety Company



Important

The W65 Self-Rescuer is an air-purifying device designed to protect the wearer from toxic carbon monoxide. ***It does not supply oxygen but functions to oxidize carbon monoxide to carbon dioxide with resulting reaction heat. Therefore, when the W65 Self-Rescuer is worn in an atmosphere containing carbon monoxide, the air entering the wearer's mouth will be hot and dry.*** *The inhaled air's temperature is dependent upon the carbon monoxide concentration; the higher the concentration, the higher the temperature. The very presence of heat indicates that carbon monoxide is present in the air being drawn into the W65 Self-Rescuer, and the W65 Self-Rescuer should never be discarded because of discomfort from hot dry air.* ***All air must be drawn through the W65 Self-Rescuer.***

The W65 Self-Rescuer contains a heat exchanger to reduce the discomfort caused by high concentrations of carbon monoxide. For example, tests at 1.5% carbon monoxide showed that the heat exchanger will effectively reduce the inhaled air temperature from approximately 300˚F to 150˚F. Though uncomfortable, one can tolerate even higher inhaled air temperatures since the respiratory system itself is an effective heat exchanger. The importance of training workers to use the nose clip at all times and to breathe through the W65 Self-Rescuer until they reach fresh air is emphasized by the fact that carbon monoxide concentration of 0.5% (5000 ppm) can cause rapid collapse, unconsciousness, and death within a few minutes. It is far better to be alive with a hot or blistered mouth than to be overcome or killed by carbon monoxide. Do not sneak a breath or two of relatively cool air into the mouth by opening the lips.

Note: *For further cautions and instructions, including the importance of training in the use of this device, refer to the USBM* ***Handbook for Miners****, and USBM Instruction Guide 2,* ***MSA W65 Self-Rescuer.***

Accessories

W65 Self-Rescuer Respirator

Part Number	Description
455299	W65 Self-Rescuer Respirator, complete in carton
461100	W65 Self-Rescuer Respirator, with protective boot and neoprene holster

Holster

Adapts W65 Self-Rescuer to belts up to 2½" in width

Part Number	Description
455535	Leather holster to adapt W65 Self-Rescuer to belts up to 2½" in width
460027	W65 Self-Rescuer Respirator, with protective boot and neoprene holster

Boot

Protective black rubber boot for W65 Self-Rescuer

Part Number	Description
449428	Boot, protective, for W65 Self-Rescuer

Training Model (red case)

A special training model, which does not contain chemicals, simplifies training in the use of the W65 Self-Rescuer. After use, it can be cleaned, reassembled, and used again.

Part Number	Description
455696	W65 Self-Rescuer Training Model

Approvals & Standards

The W65 Self-Rescuer Respirator is approved by the National Institute of Occupational Safety and Health (Approval No. TC-14G-82) for self-rescue from carbon monoxide. (Previously assigned Bureau of Mines Approval No. 14F-76.)

Note: This bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.

ISO 9001 CERTIFIED

ID 10-00-10-MC / May 2013

CARROLL TECHNOLOGIES GROUP

DISTRIBUTED BY:
Carroll Technologies Group
Phone: 865-859-9839
Email: jj@carrollengineeringco.com
Website:
www.carrolltechnologiesgroup.com