

## Silica Dust-Concrete Dust Solution

### *What is Respirable Crystalline Silica?*

*Crystalline silica is a common mineral found in the earth's crust. Materials like sand, stone, concrete, and mortar contain crystalline silica. It is also used to make products such as glass, pottery, ceramics, bricks, and artificial stone.*

Respirable crystalline silica – very small particles at least 100 times smaller than ordinary sand you might find on beaches and playgrounds – is created when cutting, sawing, grinding, drilling, and crushing stone, rock, concrete, brick, block, and mortar. Activities such as abrasive blasting with sand; sawing brick or concrete; sanding or drilling into concrete walls; grinding mortar; manufacturing brick, concrete blocks, stone countertops, or ceramic products; and cutting or crushing stone result in worker exposures to respirable crystalline silica dust. Industrial sand used in certain operations, such as foundry work and hydraulic fracturing (fracking), is also a source of respirable crystalline silica exposure. Workers who inhale these very small crystalline silica particles are at increased risk of developing serious silica-related diseases, including:

- Silicosis, an incurable lung disease that can lead to disability and death;
- Lung cancer;
- Chronic obstructive pulmonary disease (COPD); and
- Kidney disease.

### *What does the standard require?*

The standard requires employers to limit worker exposures to respirable crystalline silica and to take other steps to protect workers.

The standard provides flexible alternatives, especially useful for small employers. Employers can either use a control method of the construction standard, or they can measure workers' exposure to silica and independently decide which dust controls work best to limit exposures to the PEL in their workplaces.

### *Recommendation*

NIOSH recommends the use of half-facepiece particulate respirators with N95 or better filters for airborne exposures to crystalline silica at concentrations less than or equal to 0.5 mg/m<sup>3</sup>. The Occupational Safety and Health Administration (OSHA) also specifies the use of at least a 95-rated filter efficiency [29 Code of Federal Regulations (CFR) 1910.134]. The recommendation for a 95-rated filter efficiency reflects the improved filter efficiency of N95 filters over the earlier dust and mist (DM) filters. A comprehensive respirator program must be instituted prior to the use of 42 CFR 84 respirators. The requirements for a comprehensive respirator program may be found in the OSHA respiratory protection standard (29 CFR 1910.134).

# SILICA & CONCRETE DUST KIT

RECOMMENDED FOR CONSTRUCTION  
OR SILICA DUST PROTECTION

## P100 "Pancake" Filter

- NIOSH Approved P100 99.97% filter efficiency effective against all silica, concrete and various forms of construction dust.
- Professional Series facepiece provides more comfort and greater durability.
- Soft, comfortable silicone facepiece.
- Each facepiece provided with a unique, bonus "Hygiene Guard" for clean storage and product protection.
- Easy-to-adjust, comfortable head strap assembly.

### KIT INCLUDES:

- 1 – Silicone Rubber Half Mask Respirator
- 4 – P100 Filters



### PACKAGING

Catalog No.	Part No.	Master Packaging	Case Wt.	Case Dimensions	Case Cube	Inner Barcode	Case Barcode
9257	089257-KIT (Med)	1/bag, 12/case	9 lbs	19" x 13" x 11.75"	1.68 cf	0-44585-89257-5	5-00-44585-89257-0
9357	089357-KIT (Lg)	1/bag, 12/case	9 lbs	19" x 13" x 11.75"	1.68 cf	0-44585-89357-2	5-00-44585-89357-0

### REPLACEMENT ITEMS - Sold in Full Case Quantities

XP100	08XP100	2/bag, 100/case	6 lbs	22" x 17.5" x 5.5"	.8 cf	0-44585-71520-1	5-00-44585-71520-6
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## P100 Filter for Construction or Silica Dust Protection

- NIOSH Approved P100 99.97% filter efficiency.
- Professional Series facepiece provides more comfort and greater durability.
- Soft, comfortable silicone facepiece.
- Each facepiece provided with a unique, bonus "Hygiene Guard" for clean storage and product protection.
- Easy-to-adjust, comfortable head strap assembly.

### KIT INCLUDES:

- 1 – Silicone Rubber Half Mask Respirator
- 2 – P100 Cartridges



### PACKAGING

Catalog No.	Part No.	Master Packaging	Case Wt.	Case Dimensions	Case Cube	Inner Barcode	Case Barcode
9256	089256-KIT (Med)	1/bag, 12/case	9 lbs	19" x 13" x 11.75"	1.68 cf	0-44585-89256-8	5-00-44585-89256-3
9356	089356-KIT (Lg)	1/bag, 12/case	9 lbs	19" x 13" x 11.75"	1.68 cf	0-44585-89356-5	5-00-44585-89356-0

### REPLACEMENT ITEMS - Sold in Full Case Quantities

GX70	08GX70	2/bag, 60/case	8 lbs	12.5" x 13" x 7.5"	.8 cf	0-44585-71470-9	5-00-44585-91470-8
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