

DATE: 5/14/78	BULLETIN TITLE: Industrial Hygiene	BULLETIN CATEGORY: Industrial Hygiene and Toxicology	BULLETIN NO.: 15
SUBJECT: Respiratory Protection		STATUS: New	

PLAINTIFF'S EXHIBIT

FD-1067a

I. Scope and Application

This bulletin and previously-issued bulletins on this subject provides guidelines for establishing respiratory protection practices at Company facilities to comply with OSHA and corporate requirements. This bulletin also lists NIOSH-certified and Industrial Hygiene Services-approved respirators.

II. Minimal Acceptable Respiratory Protection Program

Minimum requirements to conserve employee health by use of respirators have been outlined in an Industrial Relations Bulletin (Employee Health Services Bulletin No. 6---Respiratory Protective Equipment---OSHA 1910.134, dated January 31, 1973). This bulletin reemphasizes corporate responsibilities and summarizes OSHA requirements for respiratory protection procedures and assigns administrative and functional responsibilities to industrial hygienists, industrial physicians, safety engineers, and supervisory personnel. The bulletin underscores the Company's continuing responsibilities to use engineering controls, alteration of work practices, and administrative procedures wherever feasible to control exposures to toxic or nuisance airborne contaminants before respiratory protection is authorized.

When respirators must be used to protect employee health, OSHA and corporate requirements for minimal acceptable respiratory protection programs include:

1. Written standard operating procedures governing selection and use of each type of respirator of each work operation shall be established. These procedures shall be available for review by corporate staff industrial hygienists and OSHA compliance officers. Employees shall be familiar with these procedures.
2. Respirators shall be selected on basis of hazards to which employees are exposed. Degree of exposure is determined by industrial hygiene survey.
3. Employees shall be instructed and trained at sufficient intervals in proper use of assigned respirators and limitations of the respirators.
4. Respirators should be assigned to individual employees for their exclusive use..
5. Respirators shall be regularly cleaned and disinfected. Those issued for exclusive use by one employee should be cleaned after each day's use, or more often if necessary. Those used by more than one employee shall be thoroughly cleaned and disinfected before issuance to a different employee.
6. Respirators shall be stored in convenient, clean, and sanitary locations.
7. Respirators used routinely shall be inspected during cleaning. Worn or deteriorated parts shall be replaced. Respirators for emergency use, such as self-contained devices, shall be thoroughly inspected at least monthly and after each use.

8006 0048

PQ

PRODUCED BY FORD

8. Appropriate surveillance of work area conditions and degree of employee exposure or stress shall be maintained.
9. There shall be regular inspection and evaluation to determine continued effectiveness of the program. A record shall be kept of inspection dates and findings for respirators maintained for emergency use.
10. Employees should not be assigned to tasks requiring respirators unless it has been determined they are physically able to perform the work and use the equipment. A physician shall determine what health and physical conditions are pertinent. The respirator user's medical status should be reviewed periodically.
11. Only MIOBH-approved respirators approved by Industrial Hygiene Services shall be used when available. The respirator furnished shall provide adequate respiratory protection against inhalation hazards for which it is designed.

I. Expiration of Bureau of Mines Respirator Approvals

Already purchased Bureau of Mines-approved respirators will be approved for use until the following dates, unless, in the case of certain self-contained breathing apparatus only, they are upgraded to meet the requirements of 30 Code of Federal Regulations Part II and are relabeled:

- a. Self-contained breathing apparatus -- March 31, 1979
- b. Supplied-air respirators ----- March 31, 1980

Approvals by the Bureau of Mines for the following classes of respirators expired on March 31, 1976:

- a. Dust, fume, and mist respirators
- b. Chemical-cartridge respirators

Company facilities using non-approved respirators should effect change.

V. Special Provisions for Certain Airborne Contaminants

Where respiratory protection must be worn to protect employee health as a result of extensive exposures to the following airborne contaminants, Industrial Hygiene Services shall be consulted to select appropriate respirators in accordance with government regulations and standards:

- | | |
|-----------------------------------|----------------------|
| a. Asbestos | f. Inorganic Lead |
| b. Vinyl Chloride | g. Inorganic Arsonic |
| c. Other EPA-regulated Carcinogen | h. Acrylonitrile |
| d. Radioactive Isotopes | i. Cotton Dust |
| e. Other Air Contaminants | |

8006 0049

PQ

V. Approved Respiratory Protective Devices

The following respiratory protective devices have been approved by the U.S. Department of the Interior (Mining Enforcement and Safety Administration) and the U.S. Department of Health, Education, and Welfare (National Institute of Occupational Safety and Health) as well as Industrial Hygiene Services, Industrial Hygiene and Toxicology Department:

A. SELF-CONTAINED BREATHING APPARATUS

BioMarine part numbers 45-600 and 45-100, (with part numbers 45-200 sorbent canister), 45 minute compressed-oxygen self-contained breathing apparatus.

Mine Safety Appliances part numbers 457153, 457154, 95066 and 96363, ½-hour compressed-air demand-type self-contained breathing apparatus.

Mine Safety Appliances part numbers 95069 and 96338, ½-hour compressed-air pressure-demand-type self-contained breathing apparatus.

SurvivAir part numbers 9065-03 and 9865-03, 15 minute compressed-air demand-type self-contained breathing apparatus for escape only.

Scott part number 900000-00, ½-hour self-contained demand-type compressed-air breathing apparatus.

Scott part number 900014-00, ½-hour self-contained pressure-demand-type compressed-air breathing apparatus.

Scott part number 900002-00, 15-minute self-contained demand-type compressed-air breathing apparatus.

Scott part number 900015-15, 15-minute self-contained pressure-demand-type compressed-air breathing apparatus.

SurvivAir part numbers 9038-00, 9038-02, 9838-00 and 9838-02, demand-type ½-hour compress-air self-contained breathing apparatus.

SurvivAir part numbers 9038-20, 9038-22, 9838-20 and 9838-22, pressure-demand-type ½-hour compressed-air self-contained breathing apparatus.

Mine Safety appliances part numbers 457150, 95061, 457151, and 95068, demand-type 15 minute compressed air self-contained breathing apparatus.

Mine Safety Appliances part numbers 95063 and 460262, pressure-demand-type 15 minute compressed-air self-contained breathing apparatus.

B. GAS MASKS

Mine Safety Appliances part numbers 461481, 461482, 461483, 461484, 461485 and 461486, gas masks (with part number 461480 canister) for respiratory protection against vinyl chloride.

Scott part numbers 601211-17 and 601221-17, gas masks (with part number 004-VCL canister) for respiratory protection against vinyl chloride.

Mine Safety Appliances part numbers 448979, 448980, 448981, and 448982, gas masks (with part number 448973 canister) for respiratory protection against ammonia and dusts and mists.

Mine Safety Appliances part numbers 448975, 448976, 448977, and 448978, gas masks (with part number 448974 canister) for respiratory protection against organic vapors and dusts and mists.

Mine Safety Appliances part numbers 460131, 460132, 460133, and 460134, gas masks (with part number 460113 canister) for respiratory protection against chlorine and dusts and mists.

C. SUPPLIED-AIR RESPIRATORS

Cosco Safety Products PI-800 series, supplied-air respirators (types C or CE continuous-flow).

Scott part numbers 4616-11, -12, -15, -21, -22, and 25; and 4622-11, -12, -15, -21, -22, and -25, supplied-air respirators (type C continuous-flow type) with 4266-15, 4265-25, and 4264-50 air supply hose.

Scott part numbers 4616-18, -19, -28, and 29; and 4622-18, -19, -28, and -29, supplied-air respirators (type C continuous-flow type) with 4259-15, 4256-25, and 4257-50 air supply hose.

Scott part number 802230, supplied-air respirator (type C demand and continuous-flow type).

Scott part number 801548, supplied-air respirator (type C pressure-demand type).

Mine Safety Appliances part numbers 457165, 84283, 46539, 457164, 93928, and 94988, supplied-air respirators (type C demand class).

Mine Safety Appliances part numbers 460862, 460863, 460864, 460865, 461703, 461717, 461718, and 461719, supplied-air respirators (type C continuous-flow class).

Mine Safety Appliances part number 457623, supplied-air respirator (type B).

Mine Safety Appliances part numbers 460903, 460904, 460905, 460906, 461709, 461710, 461711, and 461712, supplied-air respirators (type C continuous-flow class).

Mine Safety Appliances part numbers 460907, 460908, 460909, 460910, 461713, 461714, 461715, 461716, supplied-air respirators (type CE continuous-flow class).

American Optical part number R6099, supplied-air respirator (Type C and CE continuous-flow class).

American Optical part number 56001, supplied-air respirator (Type C continuous-flow class). Approval TC-19C-89.

Mine Safety Appliances part numbers 457157, 93224, and 93225, supplied-air respirators, (Type C demand-class).

Mine Safety Appliances part numbers 89104, 461669, 461699, and 461700, supplied-air respirators (Type C pressure-demand class).

D. DUST, FUME, AND MIST RESPIRATORS

M Company part number 9900, dust respirator for protection against dusts having an air contamination level not less than 0.05 milligram per cubic meter of air; or dusts having an air contamination level not less than 2 billion particles per cubic foot ... and asbestos containing dusts.

3M Company part number 9910, dust respirator for protection against dusts and mists having a time weighted average exposure limit not less than 0.05 mg/M^3 or 2 million particles per cubic foot and asbestos containing dusts and mists.

Willson part number 1410, respirator: (1) a reuseable respirator for protection against dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf, and asbestos containing dusts and mists. (2) a single use respirator for protection against pneumoconiosis and fibrosis producing dusts and mists and asbestos containing dusts and mists.

Mine Safety Appliances part number 459440, respirator (with part number 459595 (10) or 459693 (100) filters) for respiratory protection against dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf, and asbestos-containing dusts and mists.

Mine Safety Appliances part number 459438, respirator (with part number 459321 filters) for respiratory protection against dusts, fumes, and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf, radon daughters attached to the above dusts, fumes, and mists and asbestos-containing dusts and mists.

Mine Safety Appliances part number 459439, respirator (with part number 459322 filters) for respiratory protection against dusts, fumes, and mists having a time weighted average less than 0.05 mg/M^3 and radionuclides.

Mine Safety Appliances part number 96000 or 457344, respirator (with part number 96042 filters) for respiratory protection against dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf.

Willson part number 560, respirator (500-series respirator with R60 filter) for respiratory protection against dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf, and asbestos-containing dusts and mists.

Willson part number 1210, respirator (1200 series respirator with R10 filters) for respiratory protection against dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf, and asbestos-containing dusts and mists.

Willson part number 1211, respirator (1200 series respirator with R11 filters) for respiratory protection against dusts, fumes, and mists having a time weighted average not less than 2 mppcf, and asbestos-containing dusts and mists.

American Optical part number R5030, respirator (with R30 filters) for respiratory protection against dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf, and asbestos-containing dusts and mists.

American Optical part number R6030, respirator (with R30 filters) for respiratory protection against dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf, and asbestos-containing dusts and mists.

Sa ft. part numbers 662-1 and 662-2, respirators (with 502-R filter) for respiratory protection against dusts, fumes, and mists having a time weighted average less than 0.05 mg/M^3 , and radionuclides.

Mine Safety Appliances part numbers 88479 and 457117, respirators (with part number 88480 filter) for respiratory protection against dusts, fumes, and mists having a time weighted average less than 0.05 mg/M^3 , and radionuclides.

Mine Safety Appliances part number 460185, respirator (with part number 459322 filter) for respiratory protection against dusts, fumes and mists having a time weighted average less than 0.05 mg/M^3 , and radionuclides.

Mine Safety Appliances part number 461683, respirator (with part number 457481 filter) for respiratory protection against dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf.

Mine Safety Appliances part number 460357, respirator (with part number 457481 filter) for respiratory protection against dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf.

Glendale Optical part number GR-500, respirator for protection against pneumoconiosis and fibrosis producing dusts.

Horton part number 75BP80, respirator (with part number 7500-8 filter) for protection against dust, fume and mist having a time weighted average not less than 0.05 mg/M^3 and radionuclides.

American Optical part numbers R5057 and R6057, air purifying respirator (with part number R57 filter) for respiratory protection against dusts, fumes, and mists having a time weighted average less than 0.05 mg/M^3 , and radionuclides.

American Optical part numbers R5056 and R6056, air-purifying respirators (with part number R56 filter) for respiratory protection against dusts, fumes, and mists having a time weighted average not less than 0.05 mg/M^3 , dusts and mists having a time weighted average not less than 2 mppcf, and asbestos-containing dusts and mists.

American Optical part number R8100, respirator (with part number R100 filter) for respiratory protection against dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf.

Glendale part numbers GR2000 and GR4000, respirator (with part number F-10 filter) for respiratory protection against dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf, and asbestos-containing dusts and mists.

Pulmosan part number L800, respirator (with part number C264-7 (TC-21C-157 filter) for respiratory protection against dusts and mists having a time weighted average not less than 0.05 mg/M^3 or mppcf.

American Optical part number R2090N, respirator (with part number R90N (TC-21C-166) filter) for respiratory protection against dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf.

3M Company part numbers W-250, W-252, W-253, and W-254, respirator (with part number W-2031 filter (TC-21C-136A) for respiratory protection against dusts, fumes, and mists having a time weighted average less than 0.05 mg/M^3 , radionuclides, and radon daughters attached to the dusts, fumes, and mists.

American Optical part number R8156, air-purifying respirator (with R156 (TC-21C-169) filter) for protection against dusts, fumes, and mists having a time weighted average not less than 0.05 mg/M^3 and dusts and mists having a time weighted average not less than 2 mppcf.

Glendale part numbers GR1000 and GR3000, respirators (with F-10A filters for protection against dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf.

3M Company part number 8800, disposable respirator for protection against pneumoconiosis and fibrosis producing dusts.

Scott Aviation part numbers 604035-00, 6413-2100, and 6411,2100, respirators (with 64127-00 (TC-21C-177 filters) for respiratory protection against dusts and mists having a time weighted average not less than 0.05 milligram per cubic meter or 2 mppcf.

Scott Aviation part numbers 6411-2050, 6413-2050, and 604022-50, respirators (with 604412-50 (TC-21C-178) filters) for respiratory protection against dusts, fumes, and mists having a time weighted average less than 0.05 mg/M³, radon daughters and radionuclides.

E. CHEMICAL CARTRIDGE RESPIRATORS

Mine Safety Appliances part number 459433, respirator (with part number 459315 cartridges) for respiratory protection against not more than 1,000 ppm organic vapors, dusts, and mists having a time weighted average not less than 0.05 mg/M³ or 2 mppcf, and asbestos-containing dusts and mists. (for dusts and mists, add part numbers 459595 (10) or 459693 (100) filters and 459027 covers to the above).

Mine Safety Appliances part number 459434, respirator (with part number 4593 6 cartridges) for respiratory protection against not more than 10 ppm chlorine, 50 ppm sulfur dioxide, or 50 ppm hydrogen chloride, dusts and mists having a time weighted average not less than 0.05 mg/M³ or mppcf, and asbestos-containing dusts and mists. (For dusts and mists, add part numbers 459595 (10) or 459693 (100) filters and 459027 covers to the above).

Mine Safety Appliances part number 459436, respirator (with part number 459318 cartridges) for respiratory protection against not more than 300 ppm ammonia or 100 ppm methylamine, dusts and mists having a time weighted average not less than 0.05 mg/M³ or 2 mppcf, and asbestos-containing dusts and mists. (For dusts and mists, add part numbers 459595 (10) or 459693 (100) filters and 459027 covers to the above).

Mine Safety Appliances part number 459435, respirator (with part number 459317 cartridges) for respiratory protection against not more than 1,000 ppm organic vapors, 10 ppm chlorine, 50 ppm hydrogen chloride, or 50 ppm sulfur dioxide, dusts and mists having a time weighted average not less than 0.05 mg/M³ or 2 mppcf, and asbestos-containing dusts and mists. (For dusts and mists, add part numbers 459595 (10) or 459693 (100) filters and 459027 covers to the above).

Willson part number 1221, respirator (1200 series respirator with R21 chemical cartridges) for respiratory protection against not more than 1,000 ppm organic vapors.

Willson part number 122110, respirator (1200 series respirator, with R21 chemical cartridges, R10 filters, and R682 filter retainers) for respiratory protection against not more than 1,000 ppm organic vapors, dusts, and mists having a time weighted average not less than 0.05 mg/M³ or 2 mppcf, and asbestos-containing dusts and mists.

Willson part number 122113, respirator (1200 series respirator with R21 chemical cartridges and R13 filters) for respiratory protection against not more than 1,000 ppm organic vapors, dusts, fumes, and mists having a time weighted average not less than 0.05 mg/M³, dusts and mists having a time weighted average not less than 2 mppcf, and asbestos-containing dusts and mists.

Willson part number 122114, respirator (1200 series respirator with R21 chemical cartridges, R14 filters, and R683 filter retainers) for respiratory protection against mists of paints, lacquers and enamels, not more than 1,000 ppm organic vapors; or any combination thereof.

Willson part number AGRI-TOX-2, respirator (1200 series respirator with R21 chemical cartridges, R15 filters, and R683 filter retainers) for respiratory protection against pesticides.

American Optical part number R5051, respirator (with R51 cartridges) for respiratory protection against not more than 0.10 percent organic vapors by volume.

American Optical part number R6051, respirator (with R51 cartridges) for respiratory protection against not more than 0.10 percent organic vapors by volume.

American Optical part number R5052, respirator (with R52 cartridges) for respiratory protection against not more than 10 ppm chlorine, 50 ppm hydrogen chloride, and 50 ppm sulfur dioxide.

American Optical part number R6052, respirator (with R52 cartridges) for respiratory protection against not more than 10 ppm chlorine, 50 ppm hydrogen chloride, and 50 ppm sulfur dioxide.

Willson part number 122410, respirator (with R24 cartridges and R10 filters) for respiratory protection against not more than 300 ppm ammonia, 100 ppm methylamine, dusts, and mists having a time weighted average not less than 0.05 mg/M³ or 2 mppcf, and asbestos-containing dusts and mists.

Welsh part number 7531, respirator (with 7500-1 cartridges and 7500-10 filters) for respiratory protection against organic vapors and paint, lacquer, and enamel mists.

Willson part number 1225, respirator (with R25 cartridges) for respiratory protection against not more than 1,000 ppm organic vapors, 10 ppm chlorine, 50 ppm hydrogen chloride, or 50 ppm sulfur dioxide.

Mine Safety Appliances part number 448849, respirator (with part number 459315 cartridges and 448842 filters) for respiratory protection against organic vapors and paint, lacquer, and enamel mist.

American Optical part numbers R5053 and R6053, air purifying respirators (with R53 cartridge) for respiratory protection against not more than 1,000 ppm organic vapors, 10 ppm chlorine, 50 ppm hydrogen chloride, or 50 ppm sulfur dioxide.

American Optical part numbers R5055 and R6055, air purifying respirators (with R55 cartridge) for respiratory protection against not more than 1,000 ppm organic vapors by volume and dusts and mists having a time weighted average not less than 0.05 mg/M³ or 2 mppcf.

American Optical part number R8151, respirator (with R151 cartridge) for respiratory protection against not more than one-tenth (0.1) percent organic vapors by volume.

American Optical part number R8153, respirator (with R153 cartridge) for respiratory protection against not more than 1,000 ppm organic vapors, 10 ppm chlorine, 50 ppm hydrogen chloride, or 50 ppm sulfur dioxide.

American Optical part number R8191P, respirator (with R191 cartridge) for respiratory protection against (1) mists of paints, lacquers, and enamels; (2) not more than one-tenth (0.1) percent organic vapors by volume; (3) dusts and mists having a time weighted average not less than 0.05 mg/M³ or 2 mppcf; or (4) any combination thereof.

8006 0055

PQ

PRODUCED BY FORD

American Optical part number R8151P, respirator (with R151 cartridge and R149 filter) for respiratory protection against (1) mists of paints, lacquers, and enamels; (2) not more than one-tenth (0.1) percent organic vapors by volume; (3) dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf; or (4) any combination thereof.

American Optical part number R5051P, respirator (with R51 (TC-23C-56/57) cartridge and R49 (TC-23C-94/95) filter) for respiratory protection against (1) mists of paints, lacquers, and enamels; (2) not more than one-tenth (0.1) percent organic vapors by volume; (3) dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf; or (4) any combination thereof.

American Optical part number R6051P, respirator (with R51 (TC-23C-56/57) cartridge and R40 (TC-23C-94/95) filter) for respiratory protection against (1) mists of paints, lacquers, and enamels; (2) not more than one-tenth (0.1) percent organic vapors by volume; (3) dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf; or (4) any combination thereof.

American Optical part number 5091P, respirator (with R91 (TC-23C-97/98) cartridge for respiratory protection against (1) mists of paints, lacquers, and enamels; (2) not more than one-tenth (0.1) percent organic vapors by volume; (3) dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf; or (4) any combination thereof.

American Optical part number R6091P, respirator (with R91 (TC-23C-97/98) cartridge for respiratory protection against (1) mists of paints, lacquers, and enamels; (2) not more than one-tenth (0.1) percent organic vapors by volume; (3) dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf; or (4) any combination thereof.

Palmosan part number C-251, respirator (with 17160 cartridge and C-251-7 filter) for protection against (1) mists of paints, lacquers, and enamels, (2) not more than 1,000 ppm organic vapors, or (3) any combination thereof.

American Optical part numbers R5054 and R6054, chemical-cartridge respirators (with R54 cartridges) for protection against not more than 300 ppm ammonia or 100 ppm methyl amine.

Scott Aviation part numbers 604022-13, 6411-2013, and 6413-2013, respirators for protection against not more than 1,000 parts per million organic vapors by volume. Approval TC-23C-113.

Scott Aviation part numbers 604032-13, 6411-2112, and 6413-2113, respirators for protection against not more than 1,000 parts per million organic vapors by volume, and dusts and mists having a time weighted average not less than 0.05 milligram per cubic meter or 2 mppcf. Approval TC-23C-114.

Scott Aviation part numbers 604022-01, 6413-2001, and 6411-2001, respirators for protection against not more than 10 parts per million chlorine, 50 parts per million hydrogen chloride, or 50 parts per million sulfur dioxide. Approval TC-23C-115.

Scott Aviation part numbers 604032-01, 6413-2101, and 6411-2101, respirators for protection against not more than 10 parts per million chlorine, 50 parts per million hydrogen chloride, or 50 parts per million sulfur dioxide, and dusts and mists having a time weighted average not less than 0.05 mg/M^3 or 2 mppcf.

Scott Aviation part numbers 6411-2113 and 6413-2213, respirators (with 604412-13 cartridges and 68176-00 filters) for protection against (1) mists of paints, lacquers, enamels, (2) not more than 1,000 parts per million organic vapors by volume, or (3) any combination thereof. Approval TC-23C-117.

Norton Part number 7501 and 7501M, for respiratory protection against not more than 1,000 parts per million organic vapors.

Norton part number 7511 and 7511M, for respiratory protection against not more than 1,000 parts per million organic vapors and dusts and mists having a time weighted average not less than 0.05 mg/M³ or 2 mppcf, and asbestos-containing dusts and mists.

Norton parts number 7531 and 7531M, for respiratory protection against (1) mists of paints, lacquers, and enamels, (2) not more than 1,000 ppm organic vapors or (3) any combination thereof.

Norton part number 7503 and 7503M, for respiratory protection against not more than 1,000 ppm organic vapors, 10 ppm chlorine, 50 ppm hydrogen chloride, or 50 ppm sulfur dioxide.

Norton part number 7513 and 7513M, for respiratory protection against not more than 1,000 ppm organic vapors, 10 ppm chlorine, 50 ppm sulfur dioxide, 50 ppm hydrogen chloride, dusts and mists having a time weighted average not less than 0.05 mg/M³ or 2 mppcf, and asbestos-containing dusts and mists.

U. S. Safety - Saf-Twist Respirator part number 150T26, for protection against not more than 1000 ppm organic vapor by volume, 10 ppm chlorine, 50 ppm sulfur dioxide, 50 ppm hydrogen chloride, and dusts and mists having a time weighted average not less than 0.05 mg/M³ or 2 mppcf.

Cesco part number 95RCB5, respirator for protection against not more than 1,000 ppm organic vapor, 10 ppm chlorine, 50 ppm sulfur dioxide, 50 ppm hydrogen chloride, and dusts and mists having a time weighted average not less than 0.05 mg/M³ or 2 mppcf.

3M part number 8725, respirator for protection against not more than 1,000 ppm organic vapor 50 ppm hydrogen chloride, 10 ppm chlorine, 50 ppm sulfur dioxide, and dusts and mists having a time weighted average not less than 0.05 mg/M³ or 2 mppcf.

Notes:

None of the above organic vapor respirators should be used in atmospheres containing substances or concentrations causing high heat of reaction in the event, or in atmosphere containing substances with poor warning properties.