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3M™ Specialty Respirators 9900 Series

Technical Data Sheet

Description

The 3M™ Specialty Respirators 9900 Series meet the requirements of European Standard EN149:2001 + A1:2009, filtering facepiece respirators for use against particles. They provide effective respiratory protection for use in industries where workers will be exposed to solid (dust) particles and/or non-volatile liquid particles as well as offering relief from nuisance odours.

Applications

These respirators are suitable for use in concentrations of solid (dust) particles and/or non-volatile liquid particles up to the following limits:

Product	EN 149:2001+ A1:2009 Classification	Maximum Occupational Exposure Limit (OEL)*	Gas & Vapour
9906	FFP1 NR D	4	Hydrogen Fluoride (<OEL)
9913	FFP1 NR D	4	Organic Vapours (<OEL)
9914	FFP1 NR D	4	Organic Vapours (<OEL)
9915	FFP1 NR D	4	Acid Gas (<OEL)
9921	FFP2 NR D	12	Acid Gas (<OEL)
9926	FFP2 NR D	12	Acid Gas (<OEL)

*Many countries apply Assigned Protection Factors (APFs) which reduce the maximum concentrations of particles in which these products can be used. See national regulations and EN 529:2005.

Respiratory protection is only effective if it is correctly selected, fitted and worn throughout the time when the wearer is exposed to hazards.

Standards

Products are classified by filtering efficiency and maximum total inward leakage performance (FFP1, FFP2 and FFP3), also by usability and clogging resistance.

Performance tests in this standard include filter penetration; extended exposure (loading) test; flammability; breathing resistance and total inward leakage. Reusable products are also subjected to cleaning, storage and mandatory clogging resistance tests (clogging is optional for non-reusable products). A full copy of EN 149:2001+A1:2009 can be purchased from your national standards body.

Filter penetration

The filter penetration, initial and after 120mg of loading with both 120mg of NaCl* and Paraffin Oil, shall not exceed the following limits:

EN 149:2001+A1:2009 Classification	Maximum Filter Penetration
FFP1	20%
FFP2	6%

*Loading of NaCl may be stopped if filter penetration during loading is observed to decrease.

Total inward leakage

Ten subjects perform five test exercises whilst wearing the respirator. The total inward leakage inside of the respirator due to face seal leakage, filter penetration and valve leakage is measured for each subject exercise. The subject mean total