

MAXAIR Systems are NIOSH approved, loose fitting, particulate filter based Powered Air Purifying Respirators (PAPRs) that provide protection against dust, mists, fumes, and other airborne and aerosolized particulate contaminants of all sizes.

For Cuff, Gaiter, and Shroud headcover configurations that do not include integrated filters, MAXAIR provides two types of filters, HE and PAPR100-N for our two PAPR classes, HE and PAPR100.

NIOSH PAPR Class and Filter Types - An Overview

Through early 2020, NIOSH had one primary high-efficiency particulate filter class for Powered Air-Purifying Respirators, commonly referred to as "HE." One distinguishing requirement of this class was passing what is often referred to as the "silica dust" test, which was intended to demonstrate filter performance under heavy dust-loading, or "dirty air," conditions.

On April 14, 2020, under 42 CFR Part 84 via an interim final rule, NIOSH established the PAPR100 class in addition to the existing HE class. The PAPR100 class was intended, in part, to support lighter and more cost-effective PAPR designs. This new class includes two filter types: PAPR100-N, for non-oily particulate atmospheres, and PAPR100-P, for oily and non-oily particulate atmospheres.

One important difference between PAPR100 and HE is that PAPR100 does not require the silica dust test. Instead, PAPR100 includes NaCl testing for PAPR100-N filters or DOP testing for PAPR100-P filters, along with a required low-flow warning device that must alert the wearer, without user intervention, if airflow inside the respirator falls below the required minimum level.

MAXAIR Systems provides three different HE Filters and One PAPR100-N filter:

HE Filters:

2167-10: MAXAIR's classic cartridge design that filters particulates at a higher level than minimally required by NIOSH approval.

2166-10: MAXAIR's classic cartridge design that filters particulates at a higher level than minimally required by NIOSH approval. Additionally, the 2166-10 is a N-OV (Nuisance Organic Vapor) filter that provides protection against airborne concentrations of gas and vapour that are below Workplace Exposure Standards (WES).

2180XP-100: MAXAIR's newer, lightweight and more cost effective design for filtering particulates at a higher level than minimally required by NIOSH approval.

PAPR100-N Filter:

2181XP-100: MAXAIR's newer, lightweight and more cost effective design that filter particulates at a higher level than minimally required by NIOSH approval.



2167-10
XP Filter Cartridge



2166-10
XP N-OV Filter Cartridge



2180XP-07
Filter



2181XP-100
Filter

FILTER	MATERIAL
2167-10	Electrostatic Polypropylene, Electrostatic Modified Acrylic
2166-10	Electrostatic Polypropylene, Electrostatic Modified Acrylic, Activated Carbon
2180XP-07	Electrostatic Polypropylene, Electrostatic Modified Acrylic
2181XP-100	Electrostatic Polypropylene, Electrostatic Modified Acrylic

MAXAIR Recommended System Temperature Limits:

Use/Handling: 0°C to 54°C at a maximum 80% Relative Humidity.

Charging: 0°C to 45°C at a maximum 80% Relative Humidity.

Storage: 0°C to 35°C at a maximum 80% Relative Humidity.

All MAXAIR Systems, components, and disposables are latex free.

	EFFICIENCY	OSHA APF	
HEADCOVER	Cuff, Gaiter, Shroud	Cuff, Gaiter	Shroud
FILTER			
2167-10 2166-10 2180XP-07	99.99%	25	1000
2181XP-100	99.99%	25	1000