AirGear® PRO

TECHNICAL DATA SHEET

AirGearPro D-150V

N95 Particulate Respirator — Valved

NIOSH-APPROVED · ≥99% FILTRATION · PATENTED SHELL VALVE

The AirGearPro D-150V is a NIOSH-approved N95 filtering facepiece respirator with a molded cup design and a low-resistance exhalation valve for cooler, easier breathing during extended wear. It filters ≥95% of non-oil-based airborne particulates (≥99% as tested) and delivers a secure seal across the full range of adult face sizes. Its patented, metal-free shell valve reduces exhalation resistance by 30–50% versus conventional valves. Built for construction, industrial and trade environments.



AirGearPro D-150V Valved N95 Respirator

KEY FEATURES

- **NIOSH-approved N95** — filters ≥95% of non-oil-based particulates (≥99% in testing).
- **Patented shell valve (globally filed)** — cuts exhalation resistance ~30–50% vs. conventional valves (≈4 mmH_2O) for cooler, easier breathing on long shifts.
- **Molded cup with preformed nose panel and foam cushion** — secure seal without a metal nose clip.
- **100% pass rate** in quantitative fit testing across the full NIOSH face-size panel.
- **Ultrasonic-welded twin headband** for a stable, durable fit.
- **Metal-free construction** — no metal nose clip or staples; suited to metal-detection and food-processing environments.
- **Available in box of 10 each and box of 20 each.**

CERTIFICATION & COMPLIANCE

- **Standard:** NIOSH 42 CFR Part 84 — N95 classification (valved).
- **Approval:** NIOSH-approved; TC number printed on packaging.

TECHNICAL SPECIFICATIONS

Parameter	Specification
Respirator class	N95 particulate, valved — NIOSH 42 CFR Part 84
Filtration efficiency	≥99% as tested (NaCl, 0.3 µm @ 85 L/min); NIOSH N95 minimum ≥95%
Inhalation resistance	≤11 mmH_2O typical (NIOSH max 35 mmH_2O)
Exhalation resistance	≤4.3 mmH_2O typical (NIOSH max 25 mmH_2O)
Exhalation valve	Patented shell valve (globally filed); leakage ≤12 mL/min (spec ≤25); ~30–50% lower exhalation resistance vs conventional valves

Parameter	Specification
Filter media	Meltblown polypropylene, 38 gsm
Construction	Polypropylene nonwoven; ultrasonically welded
Nose seal	Preformed molded nose panel + foam cushion (no metal clip required)
Head straps	Ultrasonic-welded twin headband
Metal content	Metal-free — no metal nose clip or staples
Colour	White
Sizing	One size (adult) — fit-tested across full NIOSH face-size panel
Shelf life	5 years

FIT & PERFORMANCE

Quantitative fit testing (TSI PortaCount) on 18 wearers spanning the full NIOSH bivariate face-size panel returned a 100% pass rate (overall fit factor ≥100 on every subject). Combined with low inhalation and exhalation resistance, the D-150V provides a reliable seal and comfortable extended wear.

APPLICATIONS

- Oil & gas, refineries & petrochemical — dust & particulate tasks.
- Plant maintenance, shutdowns & turnaround work.
- Construction, demolition, drywall & plaster.
- Sanding, grinding, welding fume & woodworking.
- Mining, quarrying, cement & silica dust.
- Dust, pollen, mold remediation & wildfire smoke.