EN STANDARDI | EN STANDARDS

EN 149

Naprave za zaščito dihal - Polmaske za zaščito pred delci.
Respiratory protective devices - Filtering half masks to protect against particles.

Namembnost / Applications

FFP1

Zaščita pred nestrupenimi delci v tekočem ali trdnem stanju (npr. oljne meglice) v koncentracijah do 4x OEL (APF=4, NPF=4).
Protection against non-toxic solid and liquid aerosols (e.g. oil-mists) in concentrations up to 4x OEL (APF=4, NPF=4).

FFP2

Zaščita pred nestrupenimi ali sredjestrupenimi delci v tekočem ali trdnem stanju (npr. oljne meglice) v koncentracijah do 12x OEL (APF=10, NPF=12).
Protection against non toxic and low-to-average toxicity solid and liquid aerosols (e.g. oil-mists) in concentrations up to 12x OEL (APF=10, NPF=12).

FFP3

Zaščita pred nestrupenimi, srednjestrupenimi ali visokostrupenimi delci v tekočem ali trdnem stanju (npr. oljne meglice) v koncentracijah do 30x OEL (APF=20, NPF=50).
Protection against non-toxic, low-to-average toxicity and high toxicity solid and liquid aerosols (e.g. oil-mists) in concentrations up to 30x OEL (APF=20, NPF=50).

OEL

Omejitev poklicne izpostavljenosti.
Occupational Exposure Limit.

NPF

Nominalni zaščitni koeficient.
Nominal Protection Factor.

***APF**

Zajamčeni zaščitni koeficient.
Assigned Protection Factor.

Razred/Class	APF*	Meja prodiranja filtra (pri pretoku zraka 95 L/min) / Filter penetration limit (at air flow 95 L/min)	Uhajanje navznoter / Inward leakage
FFP1	4	Filtrira vsaj 80% delcev v zraku Filters at least 80% of airborne particles	< 22%
FFP2	10	Filtrira vsaj 94% delcev v zraku Filters at least 94% of airborne particles	< 8%
FFP3	20	Filtrira vsaj 98% delcev v zraku Filters at least 98% of airborne particles	< 2%

"D" dolomitski test I the dolomite clogging test.

S tem testom se preveri ali maska ohranja dobro raven dihalne odpornosti, potem ko je izpostavljena visoki ravni dolomitnega prahu. To pomeni, da je simbol "D" indikator kakovosti uporabljenega filtrirnega materiala in zagotavlja dolgotrajno nošenje maske tudi pri visokih koncentracijah prahu.

This test checks whether the mask maintains a good level of breathing resistance after being subjected to high levels of dolomite dust. This means the "D" symbol is a quality indicator for the filter material used and ensures that a mask can be worn over a long period even at high levels of dust concentration.

EN 136 Celoobrazne maske I Full face masks

EN 140 Polmaske I Half masks

EN 148 Filtri z univerzalnim navojem I Filters with universal thread

EN 14387 Plinski filtri in kombinirani filtri I Gas filter(s) and combined filter(s)

EN 405

Dihalne zaščitne naprave - ventilne filtrirne polmaske za zaščito pred plini ali plini in delci.
Respiratory protective devices - valved filtering half masks to protect against gases or gases and particles.

EN 143 Naprave za zaščito dihal - Filtri za delce I Respiratory protective devices - Particle filters

Glede na svojo učinkovitost so filtri za delce razdeljeni v tri kategorije:
P1 - nizka filtracija, namenjena samo za uporabo proti trdnim delcem.
P2 - srednja filtracija, razdeljena glede na sposobnost filtrov za odstranjevanje trdnih in tekočih delcev ali samo trdnih delcev.
P3 - visoka filtracija, razdeljena glede na sposobnost filtrov za odstranjevanje trdnih in tekočih delcev ali samo trdnih delcev.

Based on their efficiency, particle filters are divided into three categories:
P1 - low filtration, intended for use against solid particles only.
P2 - medium filtration, subdivided according to the filters' capacity to remove both solid and liquid particles or solid particles only.
P3 - high filtration, subdivided according to the filters' capacity to remove both solid and liquid particles or solid particles only.

Razred/ Class	Največji prodor preskusnega aerosola v filter (%) / Maximum filter penetration of test aerosol (%)		Največji dihalni upor (mbar *)/ Maximum breathing resistance (mbar*)	
	Preskus natrijevega klorida pri 95 l/min / Sodium chloride test at 95 l/min	Preskus parafinskega olja pri 95 l/min / Paraffin oil test at 95 l/min	Pri 30 l/min / at 30 l/min	Pri 95 l/min / at 95 l/min
P1	20%	20%	0,6	2,1
P2	6%	6%	0,7	2,4
P3	0,05%	0,05%	1,2	4,2

P = kategorija delcev / particle category, **NR** = za enkratno uporabo / not reusable, **R** = za večkratno uporabo / reusable

Nivo zaščite / Protection level	Barva / Colour	Tipi tveganja / Hazard types	Primer / Example
A1		Organski plini in hlapi, vrelišče > 65 ° C Organic gases and vapours, boiling point > 65°C	Delo s topili, ustvarjenimi z laki, barvami in lepili Working with solvents created by varnish, paints and adhesives
A2		= A1	Kot A1, vendar do višjih koncentracij As A1 but to higher concentrations
A1B1E1		Kot A1 + anorganski plini in hlapi + kisli plini As A1 + inorganic gases and vapours + acid gases	Kot A1 + deluje s klorom, bromom, vodikovim cianidom, žveplovim dioksidom, klorovodikovo kislino in drugimi kislinskimi plini As A1 + working with chlorine, bromine, hydrogen cyanide, sulfur dioxide, hydrochloric acid and other acid gases
A1B1E1K1		Kot A1B1E1 + amonijak As A1B1E1 + ammonia	Kot A1B1E1 + delo z amonjakom As A1B1E1 + working with ammonia
A2B2E1		= A1B1E1	Kot A1B1E1, vendar do višjih koncentracij As A1B1E1 but to higher concentrations
A2B2E2K2		Kot A1B1E1 + amonijak As A1B1E1 + ammonia	Kot A1B1E1 + deluje z amoniakom, vendar v višjih koncentracijah As A1B1E1 + working with ammonia but to higher concentrations
AX		Vrelišče organskih hlapov ≤ 65 ° C Organic vapours boiling point ≤ 65°C	Delo s hlapi z nizkim vreliščem npr. aceton, diklorometan Working with low-boiling vapours e.g. acetone, dichloromethane
Hg P3		Živo srebro Mercury	Delo s hlapi živega srebra Working with mercury vapours