

BLS 510B FFP2 R D EN 149:2001+A1:2009

Cod. 8006156



EN 149:2001+A1 tests	FFP2 R D Requirements	BLS 510B FFP2 R D
Total filtering efficiency (%)	> 92	97
Breathing resistance (mbar)	inhal. 30 l/min	< 0,7
	inhal. 95 l/min	< 2,4
	exhal. 160 l/min	< 3,0
	after clogging inhal. 95 l/min	< 5,0
Filter material efficiency (DOP) (%)	after 3 min	> 94
	after 63 min (long exposure)	> 94
	after storage	> 94
	after clogging	> 94

Description

BLS 510B FFP2 R D filtering facepieces provides effective respiratory protection in industrial environments where workers will be exposed to non-volatile solid and/or liquid particles (dusts, mists, fumes).

- Cup shape.
- Headband made by two elastic straps.
- Adjustable nose-clip between the filter material layers and soft inner lining on nose, to ensure a good face seal over a range of face sizes.
- Exhalation valve, with a low breathing resistance, which drops heat and humidity inside the respirator, makes breathing easier and makes the respirator suitable for hot humid work place.
- R marking to specify that the facepieces is Reusable for more than one work shift.
- D marking to specify that the facepieces meets the clogging resistance requirements and then it offers an high level of filtering efficiency also in very dusty environments.
- Tested and CE approved to new EN 149:2001+A1:2009 standard.

Materials

The following materials are used in the production of BLS 510B filtering facepieces:

- Filter: filtering material in layers, non irritating, polypropylene non-woven fabric
 - Nose clip: reinforced plastic material
 - Face seal: foam PVC rubber
 - Straps: Thermoplastic elastomer
 - Staples: Steel
 - Valve/Valve diaphragm: polypropylene /para rubber
- Weight: 21 g

Level of protection

BLS 510B FFP2 R D filtering facepieces is suitable for protection against non-volatile solid and/or liquid particles up to 10* times the Threshold Limit Value (TLV-TWA).

*= APF, Assigned Protection Factor (in accordance to EN 529:2005 standard - value for Italy).

Cleaning

BLS 510B FFP2 R D filtering facepieces is R marked, i.e. it can to be used for more than one shift; the face seal must be cleaned at the end of each shift using a cleansing wipe. Do not immerse product in water..

Storage and transportation

BLS 510B FFP2 R D particle filtering facepieces has a shelf life of 10 years. End of shelf life (expiry date) is marked on the product packaging.

Product should be stored in clean, dry conditions within the temperature range: +5°C to +40°C with a maximum relative humidity of 60%.

When storing or transporting this product, use original packaging provided

Certification

BLS 510B FFP2 R D filtering facepieces meets the requirements of the European Directive 89/686/EEC (Personal Protective Equipment) and is thus CE marked, as a PPE of III category, according to EN 149:2001+A1:2009 standard. CE Certification (Art.10) and final product control (Art.11.A) have been issued by Italcert S.r.l. (Notified body n°0426).

BLS certified his own Quality Management System according to EN ISO 9001:2008 regulation



Certification test

• Efficiency of filter material

Penetration of filter material has been tested with two test aerosols, Sodium Chloride (NaCl) and Paraffin Oil (DOP). The following results in terms of penetration are registered: 1) Initial penetration (3 minutes after test starting); 2) maximum penetration during the test until reaching the concentration of 120 mg of test aerosol (Exposure test) 3) only for reusable device, initial penetration after exposure test and storage (24 h). Less is the quantity of aerosol inside the facepiece, better is the filtering efficiency of the respirator.

• Total filtering efficiency

The total inward leakage consists of three components: face seal leakage, exhalation valve leakage (if exhalation valve fitted) and filter penetration. The test provides that ten subjects carry out a sequence of exercises that simulates the practical working activity, wearing the respirator; less is the quantity of aerosol inside the facepiece, better is the filtering efficiency of the respirator.

• Breathing resistance

The breathing resistance offered by the filter has been tested with 30 l/min and 95 l/min airflows for the inhalation and 160 l/min airflow for the exhalation

• Clogging

Filtering facepiece is submitted to a clogging test with dolomite dust, clogging the filter with an air flow of 95 l/min until 883 mg*h*m have been reached of Dolomite have been deposited or until the is reached the value of breathing resistance for that class. After clogging, filtering facepieces are submitted to a test of filtering efficiency again

• Flammability

The filtering facepieces subjected to the test, are passed one by one through a flame with a temperature of 800°C +/- 50°C and at a speed of 6 cm/s. The respirators must not go on burning for more than 5 s after removal from the flame

Warnings

- 1) The operator must be trained to the proper use of the filtering facepieces, before use it.
- 2) This product does not protect the operator against gases and vapours. For gas and vapours protection are necessary the gas respirators.
- 3) Not to be used in atmospheres containing less than 17% oxygen.
- 4) Do not use when the concentration of the contaminants is dangerous for life or health.
- 5) Do not use in explosive atmosphere and to escape.
- 6) Leave the workplace immediately:
 - if breathing becomes difficult;
 - if dizziness or other distress occur.
- 7) Do not alter or modify the product in any way.
- 8) Discard and replace the mask if it becomes damaged, if breathing becomes difficult and in any case after 8 hours work if the facepieces is NR type (max 8 hours).
- 9) Operator must be clean shaven as facial hair will affect the efficiency of the product.
- 10) Store the filtering facepieces in a dry and clean room at a temperature within +5 °C and + 40 °C and relative humidity < 60%. If stored correctly and in the original packaging the product has a shelf life of 10 years and 5 years for models with carbon layer.
- 11) Cleaning: the filtering facepieces designed as R D, are reusable for more than one work shift, so they must be cleaned before to store them in a dry and clean place. For cleaning, use a wet wipes, of the type usually commercialized (with ingredients as Aqua, Propylene Glycol, Capric Glycerides, Parfum), to delicately clean the inner gasket.

Technical details

The inner seal has small holes around the edge of the filtering facepiece that decrease the moisture in the PPE and increase the value of comfort for the wearer



The shell filtering facepieces offer a greater user comfort and avoid the feeling of oppression of the PPE thanks to the substantive distance between the inner surface of the filtering facepiece and the user's mouth

The greater amount of fabric, emphasized by the folds on the surfaces of the filtering facepiece, and the high concavity of the mask increase the PPE duration

In order to reduce the chance of product contamination (required by various industries among which the pharmaceutical and the food industries), the internal noseclip is set between two layers of fabric to reduce as much as possible the aluminum parts of the PPE.

The harness is composed by adjustable elastics with the right level of thickness and smoothness to ensure a uniform tension over the entire length without generating excessive points of pressure.



Filtering facepieces passed Dolomite dust clogging test.
Lower breathing resistance, higher duration.