



# BLS O<sub>2</sub> 102/102V FFP2 NR D



CUP SHAPED FILTERING FACEPIECES

codes 8101061 / 8101062



## FIELDS OF APPLICATION

FFP2 disposable masks can be used to protect the wearer from dust/fibres/fumes of medium-toxicity particles in concentrations up to 12 x TLV (NPF). E.g. chemical industry, mechanical industry, agriculture, construction, foundries, etc. BLS 102/102V filtering facepieces are also suitable for healthcare workers, as they reduce the risk of potential exposure to solid and liquid aerosols present in the air, ensuring individual respiratory protection against biological agents. Models without an exhalation valve are recommended for healthcare workers when it is necessary to protect the environment (the patient) from possible contamination by the operator's breath.

## WARNINGS

1. The user must receive appropriate instruction before using the filtering facepiece;
2. The filtering facepieces do not protect the user from gases and fumes;
3. Do not use in environments with low oxygen, O<sub>2</sub> less than 17%;
4. Do not use when concentrations of pollutants are dangerous to health or life-threatening;
5. Do not use as an emergency escape breathing device;
6. Leave the work place immediately:
  - If breathing becomes difficult;
  - If you experience dizziness, nausea or alike symptoms;
7. Do not modify the filtering facepiece;
8. Discard and replace the filtering facepiece if it is damaged, if the resistance to breathing increases or after 8 hours of use if the facepiece is NR type (max 8 hours);
9. Do not use if you have a beard or sideburns because they can alter the seal;
10. The facepieces must be stored in clean containers in a dry place at temperatures between +5°C to +40°C and relative humidity below 60% up to 10 years.

## FILTRATION REQUIREMENTS

BLS adheres to much stricter criteria in its quality control processes than those dictated by EN 149:2009 standard.

### FILTRATION REQUIREMENTS ACCORDING TO EN 149:2009 STANDARD

Classification	Maximum Penetration Allowed (%) EN 13274-7:2008 Paraffin 0,4 µm 20±5 mg/m <sup>3</sup>
FFP1	20
FFP2	6
FFP3	1

### BLS FILTRATION REQUIREMENTS

Classification	Maximum Penetration Allowed (%)
FFP1	2,5
FFP2	2,1
FFP3	0,4

## DESCRIPTION

The disposable filtering facepiece BLS O<sub>2</sub> 102/102V FFP2 NR D guarantees respiratory protection against aerosol and solid particulates. The cup-shaped form, the elastics attached to four points and the external nose clip which can be modelled on the facepieces ensure the best fit for most facial types. The exhalation valve (model BLS O<sub>2</sub> 102V) reduces breathing resistance and reduces the humidity inside the facepiece, making breathing more secure even in humid or very hot workplaces.

## MATERIALS

The filtering facepiece BLS O<sub>2</sub> 102/102V FFP2 NR D is made by:

- Filtering material: polypropylene non-woven fabric;
- Nose clip: underwire covered with polypropylene (PP);
- Elastics: synthetic polyisoprene;
- Exhalation valve (model BLS O<sub>2</sub> 102V): polypropylene (PP);
- Weight model BLS O<sub>2</sub> 102: 8 g;
- Weight model BLS O<sub>2</sub> 102V: 11 g.

## CERTIFICATION

BLS filtering facepieces are:

- certified according to European Regulation 2016/425 (Personal Protective Equipments);
- certified as PPE of III category, in presumption of conformity to harmonized standard EN 149:2001 + A1:2009;
- certified and controlled according to Annex D by Italcert S.r.l. (Notified Body n°0426);
- CE marked.

BLS management system is ISO 9001 certified.

## CERTIFICATION TEST

### EFFICIENCY FILTERING MATERIAL

The efficiency of the filtering material was determined with the use of sodium chloride and paraffin oil. The FFP2 class guarantees a minimum filtering efficiency of 94%. The filtration efficiency of these masks remains unchanged even after long exposure periods.

### TOTAL FILTERING EFFICIENCY

The total inward leakage consists of two components: face seal leakage and filter penetration. Tests provide also that ten subjects carry out a sequence of exercises that simulates the practical working activity, wearing the facepiece; less is the quantity of aerosol inside the product, better is the filtering efficiency of the facepiece.

### BREATHING RESISTANCE

The breathing resistance of the filtering facepieces must be verified by tests conducted at 30 l/minute and 95 l/minute for inhalation and 160 l/minute for exhalation. The values established by law for class FFP2 are respectively 0.7 mbar, 2.4 mbar and 3.0 mbar.

### 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<sup>3</sup> 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. Filtering facepieces must not go on burning for more than 5 seconds after removal from the flame.