

## 413 K2

Cod. 8011005

## EN 14387:2004+A1:2008



Test according to EN 14387:2004+A1:2008		K2	413 K2
Minimum breakthrough time (min)	Ammonia NH <sub>3</sub> (5000 ppm)	> 40	53
	inhal 30 l/min	< 1,4	0,6
Breathing Resistance (mbar)	inhal 95 l/min	< 5,6	2,2

### Characteristics

The 413 K2 filter is an anti gas and anti particles filter that protects against contaminant gases. 413 filter is equipped with a standard threaded connection conforming to EN 148-1 standard and it's possible to use it on half mask and full face mask equipped with the same standard connection.

### Application

The 413 filter that protects from organic gases and vapours with a boiling point upper than 65°C. It can be used with substances as solvents, and microorganisms. It is a filter classified as class 2 (medium efficiency filter) against gases.

### Protection

Exposure limit for filter 413:

With half masks: for gases and vapours 30 x TLV

with full face mask: for gases and vapours until to 400\* x TLV;

\* = APF (Assigned Protection Factor) as detailed in EN 529:2005 standard

### Materials

The 413 filter is made by:

- filter case: ABS
- gas filtering part: activated charcoal K

Height (thread excluded): 60 mm

Diameter: 100 mm

Weight: 215±5 grams

**This filter can be used on full face masks and half masks.**

### Certification

The 413 filter is CE marked as a PPE of III category, as provided by the 89/686/EEC European Directive (In Italy D. Lgs 475/1992), according to the EN 14387:2004+A1:2008 technical standard. The compliance model PPE (Art. 10) and the monitored production control (Art.11.B), are certified by Italcert S.r.l., Notified Body n°0426.

BLS is a company with a quality management system certified according to the ISO 9001:2008 standard.

### Certification Tests

The 413 filter meets the requirements of 14387:2004+A1:2008 standard and has been submitted to the tests provided by class 2 for gases.

#### · Breathing resistance

The resistance offered from the filter to the air flow must be lower as possible and, in any case, must not be greater than the following values for antiparticles filters (par. 6.11 of EN 14387 standard): with an air flow of 30 l/min must be lower than 1,4 mbar and with an air flow of 95 l/min must be lower than 5,6 mbar.

#### · Efficiency of protection (gas)

The 413 filter is tested according to par. 6.12 of the EN 14387:2004 standard to determine the breakthrough times when it is exposed to a test gas at a certain concentration. For the K2 filter the test gases are those required by the standard and reported in the table, with their break-up time.

# DATA SHEET

413 K2

EN 14387:2004+A1:2008

## Applications, Limitations, Warnings

BLS filters should not be used in the following circumstances:

- Where the nature and the concentration of the contaminant are unknown, - where the oxygen content is less than 17% by volume (easily in closed environments such as wells, tunnels, cisterns or without ventilation), - where the contaminant is found to be carbon monoxide or otherwise odorless and tasteless gas - where certain conditions represent an immediate danger in life and safety for the operator - the filter mustn't be changed or altered; - leave the work area where the filter or respirator has been damaged and if you have difficulty in breathing and / or fainting; - people with altered sense of smell must refrain from the use of respiratory filters, - in works with open flames or in the presence of molten metal splashes the use of personal protective equipment with gas filters might be a risk to the operator.

### Use and maintenance of filters:

BLS filters are connected to half masks and full masks with the same connection. Each new filter is packed in a sealed bag. Choose the right filter by the color and symbol identification and verify that the type of the filter is suitable for the intended use. Check that the filter has not expired (the expiration date is printed on each filter, this date will be valid if the filter was preserved according to the instructions for storage). Check that the filter and the breathing apparatus, are not broken or damaged. In order to use it, open the sealed package, place the filter in the filter half mask or full mask, manually screwing up to the beat.

Under normal conditions of use, the filter's duration depends not only on the concentration of the contaminant but also by many other factors that are difficult to determine as the rate of air humidity, temperature, the volume of air inhaled the state of fatigue of the subject, etc. The operator shall leave the work area and replace the filter when it starts to feel the smell of the contaminant. At the end of the shift, you must place the filter in a clean and dry location, according to the instructions on the user's filter.

BLS filters are maintenance free and at the end of their use they should not be blown, washed or regenerated in any way. The exhausted filters must be replaced and disposed according to national regulations and keeping in consideration the substance retained.

**Storage time:** 5 years (factory sealed); the storage limit is marked on filter label and box.

**Storage conditions:** temperature -10°C and +50°C, RH < 70%.

**Minimum unit of sale:** box (1 filter)

## Technical Details

Each filter is tested:

- breathing resistance tests and weight for charcoal against gases

**BLS S.r.l.**

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