The Avon CTCF50 Filter is a low profile combination filter containing a pleated high-efficiency filter element for removal of aerosols, particulate matter, smoke, fumes and a carbon bed for the removal of vapors that may be released from trapped particles. It is specifically designed for removal of riot control agents and tear gases including CS, CN and OC pepper spray.

**DESCRIPTION**

**Construction Materials**

The canister body is made of a modified polyphenylene ether-polystyrene blend (PPE&PS), which is a high quality engineering construction polymer. It provides a very robust product which is extremely durable against shock and impact in operational use. The canister body is black in color and has a matte finish to reduce reflection.

The high efficiency filter element is made of PTFE, PET/PE.

The CTCF50 is entirely non-ferrous and non-magnetic.

**EFFECTIVENESS**

The Avon CTCF50 meets the relevant criteria specified by NIOSH 42CFR84 for effectiveness in the removal of CS/CN agents in aerosol and vapor form.

The filtering capacity for particles of 0.3 micron diameter is greater than 99.97%. Provides 24 hours of protection from continuous exposure to CS, CN, and OC. A particulate filter element exceeding the requirements of NIOSH 42CFR84 P100 and EN 14387 (P3), level is incorporated, ensuring effective performance against dusts, mists, fumes, and biological agents (bacteria, virus, fungal spores etc), and radioactive dusts.

<table>
<thead>
<tr>
<th>Dimensions</th>
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<tbody>
<tr>
<td>Diameter</td>
<td>Ø111 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>&lt;155 grams (typical)</td>
</tr>
<tr>
<td>Thread</td>
<td>40mm to NATO STANAG 4155</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
</tbody>
</table>

**HUMIDITY INDICATOR**

A unique standard humidity indicator is located on the top of the CTCF50 filter and visually displays performance degradation due to moisture uptake over time. The indicator turns white to blue signaling that the unit pack was compromised and the filter must be discarded.

**PERFORMANCE**

**Breathing Resistance**

< 20 mm of H₂O @ 85 l/min (typical)
ENVIRONMENTAL

When stored in its original packaging the filter canister retains its operational effectiveness and efficiency with no degradation to its performance under the following environmental storage conditions:

Operational Temperature -32°C to 71°C
The filters have been exposed to high and low ambient storage temperatures without harmful effects.

Humidity range 5% to 100% RH
The filters have been tested following storage in high humidity environments and have been found to be effective.

Rain
The filter will retain its effectiveness in heavy rainfall conditions and it is not prone to water ingress.

Salt Breeze
The filter will not deteriorate with exposure to salt breezes for 24 hours.

Sand and Dust
The filter will not deteriorate when exposed to 24 hours of wind driven sand and dust conditions.

Recommended Storage and Shelf Life
The predicted shelf life of the filter canister (sealed and packaged) is 5.5 years when stored at 20 ± 10°C, <80%RH.

PACKAGING
The CTCF50 is hermetically sealed and supplied in a package of four.

1) Although the thread form is compatible with STANAG 4155 and EN148-1 the sunken thread within the conformal filter may result in the filter not sealing to some types of PPE. It is essential that the CTCF50 filter is used only with Avon masks.