



# **C50**

# THE NEW GENERATION

**DEDICATED TO DEFENCE** 



The C50, Avon Protection's latest full face mask offers high protection, outstanding field of vision and superior comfort. The innovative design features optimise the user's time in the operational area, whether it's for battlefield CBRN protection, specialist law enforcement or counter terrorism operations. With the appropriate filter the C50 protects against a range of CBRN threats including chemical warfare agents, toxic industrial chemicals (TICS), toxic industrial materials (TIMS), biological and radiological hazards, and riot agents.

# **C50**



# **UNIQUE VISOR TECHNOLOGY**

- Unique polyurethane visor is highly flexible plus scratch and impact resistant
- Fully optically correct across the whole field of view
- Panoramic visor design gives excellent field of vision and wearer recognition whilst greatly enhancing compatibility with weapon sights
- The Vision Correction System allows prescription lenses to be mounted inside the mask
- Clear outserts for extreme environments
- Sunlight outserts for high intensity light situations
- BlueBlocker outsert delivers sharper images by filtering out specific light wavelengths
- Laser outserts for protection against specific wavelengths

## AIR FLOW MANAGEMENT

- Heat build up minimised
- Low re-breathed carbon dioxide
- Low inhalation resistance
- Excellent de-mist properties

# **USER COMFORT**

- Lightweight with a slim profile ensures mask is comfortable over long periods in the field
- Quick donning in under 9 seconds due to the pre-adjusted buckles
- 3 sizes providing secure and comfortable fit for all facial shapes and sizes
- Compatibility with helmets and CBRN protective clothing is improved due to the low profile, close contour brow, flat buckles and extended chin flap
- Filter canisters are side mounted on either left or right side minimising interference and allowing improved capability for shoulder mounted devices
- The chloro-butyl/silicone blend face piece material ensures the mask is not only high in protection but also provides a better seal and is more comfortable to wear for extended periods
- High flow fail safe drinking device, allows connection to either a canteen or bladder type hydration system

## **COMMUNICATION**

- Front mounted exhale valve allows clear direct communication
- For enhanced communication, an optional Voice Projection Unit (VPU) with internal microphone is easily connected via the Electronic Communication Port (ECP)



 Additional external communication systems can be attached via this ECP using an appropriate lead



# **SPARES & ACCESSORIES**

- Easy to maintain with simple access to key spare components such as valves
- Standard Avon accessories available; such as hydration canteens, Vision Correction System, clear and sunlight outsert lenses and a range of storage and carry bags

# CERTIFICATIONS

## CE

 C50 single filter port mask is CE certified for use in a CBRN environment (Article 10 certificate number C07-6401)

### **TIOSH**

- The C50 twin port mask is NIOSH CBRN Cap 1 approved with the CBRNF12B filter (TC-14G-0285) and NIOSH 42 CFR 84 riot control CS/CN/P100 approved with the CTF12 filter (TC-14G-0278)
- The C50 meets the latest NATO military requirements

# C50 Accessories

#### VISION



CLEAR OUTSERT
ASSEMBLY



BLUEBLOCKER OUTSERT
ASSEMBLY



SUNLIGHT OUTSERT
ASSEMBLY



LASER OUTSERT
ASSEMBLY



VISION CORRECTION
ASSEMBLY

#### STORAGE AND CARRIERS



UNIVERSAL CARRIER

#### **MASK HOODS**



TACTICAL HOOD

# C50 Technical Data

| Filter Applications |             |   |   |  |  |
|---------------------|-------------|---|---|--|--|
| Filter              | Part Number | Classification                              | Application   |  |  |
| CSCF50              | 72601/71/4  | Riot Control                                | All particulate hazards including dust, fume, bacteria and virus, plus riot agent CS (meets 8 hour NIOSH test standards) and CN (< 1 hour against NIOSH test standards).  |  |  |
| GPCF50              | 72601/70/2  | NATO CBRN                                   | Chemical, biological and radiological warfare agents in accordance with NATO requirements. Also certain toxic industrial chemicals such as chlorine, hydrogen sulphide, sulphur dioxide and organic vapours, with a boiling point of above 65°C.                    |  |  |
| CTF12               | 70010/19/2  | NIOSH Approved 42<br>CFR 84CS/CN/P100       | All particulate hazards including dust, mist, fume, bacteria and virus, plus riot agents, CS/CN/OC and low level organic vapours.   |  |  |
| CBRNF12CE           | 70010/23/1  | CE Approved<br>EN14387:04 A1 B2<br>E1 K1 P3 | Dual classification for industrial and CBRN applications. All particulate hazards including dust, mist, fume, bacteria and virus plus all NIOSH specified CBRN gases and vapours including nerve, blood, choking and blister agents and toxic industrial materials. |  |  |
| AMF12               | 70010/18    | NATO CBRN                                   | Chemical, biological and radiological warfare agents in accordance with NATO requirements. Also certain toxic industrial chemicals such as chlorine, hydrogen sulphide, sulphur dioxide and organic vapours, with a boiling point of above 65°C.                    |  |  |

| C50 Single Filter Port Mask (CE Certified) |             |  |  |  |
|--|-------------|--|--|--|
| Description                                | Part Number |  |  |  |
| C50 Mask Assembly RH LGE                   | 70501/193   |  |  |  |
| C50 Mask Assembly RH MED                   | 70501/194   |  |  |  |
| C50 Mask Assembly RH SML                   | 70501/195   |  |  |  |
| C50 Mask Assembly LH LGE                   | 70501/199   |  |  |  |
| C50 Mask Assembly LH MED                   | 70501/200   |  |  |  |
| C50 Mask Assembly LH SML                   | 70501/201   |  |  |  |

| C50 Twin Filter Port Mask      |             |  |  |  |
|--------------------------------|-------------|--|--|--|
| Description                    | Part Number |  |  |  |
| C50 Mask Assembly Twinport LGE | 70501/205   |  |  |  |
| C50 Mask Assembly Twinport MED | 70501/206   |  |  |  |
| C50 Mask Assembly Twinport SML | 70501/207   |  |  |  |

| Technical Data   |                                 |                                 |  |  |  |
|--|---------------------------------|---------------------------------|--|--|--|
| CBRN Agent Resistance  | Requirement                     | C50 performance                 |  |  |  |
| Mustard (H) Sarin (GB) Soman (GD) VX                           | 36 hours                        | Greater than 36 hours           |  |  |  |
| Laboratory protection factor performance (sodium chloride)     | 2,000                           | Greater than 10,000             |  |  |  |
| Re-breathed CO <sub>2</sub>                                    | Less than 1%                    | 0.8%                            |  |  |  |
| Inhalation resistance at:<br>30 I/min<br>95 I/min<br>160 I/min | 5 mm WG<br>15 mm WG<br>25 mm WG | 3 mm WG<br>13 mm WG<br>23 mm WG |  |  |  |
| Exhalation resistance at 160 l/min                             | 30 mm WG                        | 15 mm WG                        |  |  |  |
| Mask weight  | N/A                             | 490 gram                        |  |  |  |
| NIOSH Visual Field Score (VFS)                                 | 90                              | 96                              |  |  |  |

ALL TECHNICAL DATA FROM INDEPENDENT TESTS. CE CERTIFIED BY TNO NETHERLANDS.

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### PROTECTING THE FUTURE

 $<sup>^{\</sup>star}$  The C50 Twin Filter Mask is not CE approved.