3M[™] Full Facepiece Respirator FR-M40B – Exceptional Performance For CBRN

Emergency Response

The M-40 full facepiece is used by U.S. Armed Forces all around the world. It has been modified by 3M for easier breathing and is now available for CBRN applications.

The facepiece with $3M^{\text{\tiny M}}$ Canister FR-15-CBRN or $3M^{\text{\tiny M}}$ Canister CP3N puts 3M at the forefront of innovative products for personal safety.

- Soft silicone faceseal material helps provide a better fit and increased wearer comfort.
- Assembled with second skin and eyepiece outserts in place. Just attach 3M canister FR-15-CBRN and you have a NIOSH CBRN-approved system (TC-14G-0271). Also NIOSH-approved with 3M canister CP3N for use against CS, CN and as a P100 filter (TC-14G-0251) in riot conditions, including those with teargas.
- Two integral speaking diaphragms help provide clearer communications.
- Butyl rubber second skin helps provide enhanced permeation protection, which means greater user security.
- Dual ocular lens for enhanced personnel performance and security.
- Patented filtration technology used in our canister results in the optimum combination of easy breathing, lighter weight, service life and general comfort.
- Canister can be mounted on either side of the facepiece for easier, more accurate weapon sighting.
- Canister has a shelf life of 5 years.
- Drinking tube connection for use in non-contaminated areas.
- Available with an optional quick doff hood.

The Key Is The Canister

As a "Cap 1" approved canister, the 3M™ Canister FR-15-CBRN is tested by NIOSH to have a minimum test life of 15 minutes against various contaminants at different concentrations. Gas life tests are performed at 25° C; 25 and 80 percent relative humidity; and a flow rate of 64 liters per minute. The canister also has a minimum service life of 5 minutes when tested at a flow rate of 100 liters per minute, 50 percent relative humidity and 25° C for many gases/vapors. Service life in actual use may be shorter or longer depending on many factors including contaminant concentration.

For complete test results, call the 3M Occupational Health and Environmental Safety Division's Fax On Demand Service at 1-800-646-1655 and request document number 9020.

Agent	Test Concentration (ppm)	Breakthrough Concentration (ppm)
Ammonia	2500	12.5
Cyanogen Chloride	300	2
Cyclohexane ¹	2600	10
Formaldehyde	500	1
Hydrogen Cyanide	940	4.72
Hydrogen Sulfide	1000	5.0
Nitrogen Dioxide	200	1ppm NO ₂ or 25 ppm NO ³
Phosgene	250	1.25
Phosphine	300	0.3
Sulfur Dioxide	1500	5

¹ Cyclohexane is representative of all organic vapors with a vapor pressure less than or equal to cyclohexane.

For more information please visit 3M web site www.3M.com/OccSafety/TechData. See Technical Data Bulletin Number 159: Recommended Use of CBRN Full Facepiece Air Purifying Respirators and Technical Data Bulletin Number 162: Recommended Use of the 3M[∞] Canister FR-15-CBRN Against Various Military and Industrial Chemical Agents.

² Sum of HCN and C₂N₂

³ Nitrogen Dioxide breakthrough is monitored for both NO₂ and NO. The breakthrough is determined by which chemical, NO₂ or NO, reaches breakthrough first.