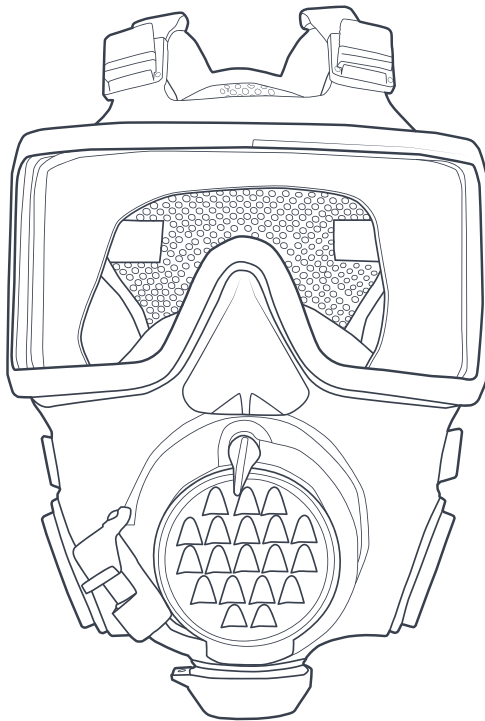




CM-8M

FULL FACE RESPIRATOR



RD101122

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Strictly follow this instruction manual while using your CM-8M Full Face Respirator. The user must fully understand and strictly follow all instructions. Use the CM-8M Full Face Respirator only for the purposes specified in this document.

The MIRA Safety CM-8M Full Face Respirator is designed for use with 40 mm NATO Standard filter cartridges and optional Powered Air-Purifying Respirator (or PAPR, sold separately). Each of these elements **MUST** be functioning properly for your CM-8M Gas Mask to work as designed. The type of filter chosen will determine the type of protection your mask provides. Please consult the manufacturer instructions for those elements before using or testing them with your CM-8M Gas Mask.

Do not discard these instructions. Keep them with the mask and ensure they are followed while using your CM-8M Gas Mask.

Comply with all local and national rules and regulations associated with gas masks and full-face respirators.

Only trained and competent personnel are permitted to inspect, repair, and service the product as detailed in the Maintenance section of this document. Do not attempt to modify or service a gas mask without sufficient training or qualification.

Use only MIRA Safety-approved spare parts and accessories or the proper functioning of the product may be impaired. Do **NOT** use a faulty product, and do not modify the product. Modifying the CM-8M Gas Mask in any way will void your warranty and may be dangerous.

Notify MIRA Safety in the event of any component fault or failure.

LIABILITY FOR PROPER FUNCTION OR DAMAGE

Liability for the proper functioning of the full gas mask is irrevocably transferred to the owner or operator to the extent that it has been improperly serviced or repaired by personnel not employed or authorized by MIRA Safety or it has been used in a matter not aligned with its intended use. MIRA Safety cannot be held responsible for damage caused by non-compliance with the recommendations above.



WARNING

IMPROPER USE OF THIS RESPIRATOR MAY RESULT IN PERSONAL INJURY OR DEATH. IMPROPER USE INCLUDES, BUT IS NOT LIMITED TO, USE IN ATMOSPHERES CONTAINING UNKNOWN CONTAMINANTS AND/OR UNKNOWN CONCENTRATIONS OF CONTAMINANTS, USE WITHOUT ADEQUATE TRAINING, DISREGARD OF THE WARNINGS AND INSTRUCTIONS CONTAINED HEREIN OR FAILURE TO INSPECT AND MAINTAIN THIS RESPIRATOR. THIS RESPIRATOR IS NOT INTENDED FOR USE IN ATMOSPHERES WHICH ARE, OR MAY BECOME, IMMEDIATELY DANGEROUS TO LIFE OR HEALTH, OR IN ATMOSPHERES WHERE THE IDENTITY AND/OR CONCENTRATION OF THE CONTAMINANT IS UNKNOWN.

THIS RESPIRATOR DOES NOT SUPPLY OXYGEN AND MUST NOT BE USED IN OXYGEN-DEFICIENT ATMOSPHERES CONTAINING LESS THAN %19.5 OXYGEN.

THIS RESPIRATOR IS INTENDED TO BE USED ONLY IN CONJUNCTION WITH AN ORGANIZED RESPIRATORY PROTECTION PROGRAM OR LARGER PERSONAL PROTECTIVE EQUIPMENT (PPE) SYSTEM.



WARNING

THE FOLLOWING INFORMATION IS MEANT TO SUPPLEMENT, NOT REPLACE, EXISTING TRAINING AND PROTOCOL REGARDING THE USE OF PPE AND GAS MASKS/FULL-FACE RESPIRATORS. PLEASE CONSULT YOUR ORGANIZATIONAL LEADERSHIP OR RELEVANT AUTHORITIES REGARDING THE DEPLOYMENT OF THIS EQUIPMENT. SEE WARNING ON THE COVER OF THIS MANUAL.



WARNING

DO NOT OPERATE THIS EQUIPMENT WHILE UNDER THE INFLUENCE OF DRUGS, ALCOHOL, OR ANY OTHER MEDICATIONS OR SUBSTANCES WHICH MAY AFFECT VISION, DEXTERITY, OR JUDGMENT. USERS OF THIS EQUIPMENT MUST BE IN GOOD PHYSICAL AND MENTAL HEALTH IN ORDER TO OPERATE IT SAFELY. DO NOT USE THIS EQUIPMENT WHEN FATIGUE PREVENTS SAFE OPERATION. STAY ALERT WHEN OPERATING THIS EQUIPMENT. INATTENTION OR CARELESSNESS WHILE OPERATING THIS EQUIPMENT COULD RESULT IN SERIOUS INJURY OR DEATH.

DESCRIPTION

The MIRA Safety CM-8M Full Face Respirator is a reusable full-face respirator / gas mask with a wide visor optimized for use with rifle optics and night vision equipment.

The MIRA Safety CM-8M Gas Mask is designed for use with 40 mm NATO Standard filter cartridges. It can be equipped with several optional accessories including (but not limited to):

- ◆ Included canteen and hydration system
- ◆ Powered Air-Purifying Respirator (PAPR, sold separately)
- ◆ MIRA Safety Gas Mask Microphone (sold separately)
- ◆ CM-8M Gas Mask Spectacle Insert (sold separately)

Each of these elements **MUST** be functioning properly for your CM-8M Gas Mask to work as designed. Please consult the manufacturer instructions regarding those elements before using or testing them with your CM-8M Gas Mask.

NOTE: The MIRA Safety CM-8M Full Face Respirator is designed for use with up to two gas mask filters at once. If a single filter is to be used instead, one of the ports **MUST** be sealed with the included 40 mm Port Cover.

MIRA Safety Customer Service is always standing by to address your questions, concerns, and warranty service needs. If you need help, don't hesitate to contact us at 888-316-1462 or Support@MiraSafety.com.



WARNING

RESPIRATORS CAN BE USED IN AN EMERGENCY; HOWEVER, TRAINING IS VERY STRONGLY RECOMMENDED BY THE MANUFACTURER. FOLLOW THE INSTRUCTIONS HEREIN CAREFULLY. THIS GAS MASK IS ONLY FOR USE IN SPECIFIC ATMOSPHERES UNDER CERTAIN CONDITIONS. USE OF THIS RESPIRATOR WITHOUT PROPER KNOWLEDGE AND TRAINING CAN RESULT IN SERIOUS INJURY OR DEATH.



GENERAL GAS MASK CAUTIONS & LIMITATIONS

- ◆ This gas mask must NOT be used in atmospheres containing less than 19.5% oxygen.
- ◆ Follow established filter cartridge change schedules to ensure maximum functionality and comfort while the mask is in use.
- ◆ Failure to properly use and maintain this gas mask/respirator could result in injury or death. MIRA Safety full-face respirators and gas masks should be used in conjunction with all local regulations and guidance regarding their use.
- ◆ Never substitute, modify, or omit parts.
- ◆ Refer to these Instructions for information on the use and maintenance of this respirator.
- ◆ Some CBRN agents may not present immediate effects from exposure but can result in delayed impairment, illness, or death.
- ◆ Note that this mask is only designed to protect the user's face and airways. The user will still be at risk of general body exposure to CBRN elements.
- ◆ Direct contact with CBRN agents requires proper handling of the respirator after each use and between multiple entries during the same use. Decontamination and disposal procedures must be followed. If contaminated with liquid chemical warfare agents, dispose of the respirator after decontamination.
- ◆ This gas mask is not for entry or use in atmospheres immediately dangerous to life and health or where hazards have not yet been fully ascertained.
- ◆ The respirator provides respiratory protection against inhalation of radiological and nuclear dust particles.
- ◆ Procedures for monitoring radiation exposure and full radiation protection must be followed.
- ◆ If the facepiece is to be used with a CamelBak, connect the CamelBak hose to the drinking tube via a HydroLink Type-M Master Adapter.
- ◆ If, during use, an unexpected hazard is encountered, immediately leave the area for clean air.
- ◆ Use in conjunction with personal protective equipment (PPE) appropriate for protecting against dermal hazards. Failure to do so may result in personal injury even when the respirator is properly fitted, used, and maintained.
- ◆ The respirator should not be used beyond 8 hours after initial exposure to chemical warfare agents to avoid the possibility of agent permeation. If liquid exposure is encountered, the respirator should not be used for more than 2 hours.

NOTE

Never use a facepiece that leaks! If a leak occurs, there is danger of exposure and potential poisoning. If you detect a leak at any point, evacuate to a safe environment where the facepiece can be readjusted or removed and refitted.

FITMENT AND TESTING

For your CM-8M Full Face Respirator to function as intended, it must be correctly fitted to the user to create a tight, working seal that passes a negative pressure test (see below). Please follow the steps below to fit your CM-8M Gas Mask to its user:

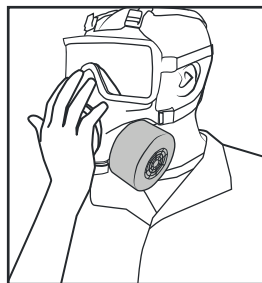
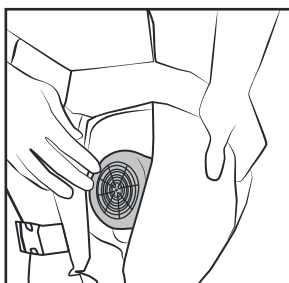
1. Loosen the harness straps fully and don the mask to get a rough idea of the required strap length.
2. Once you have a rough idea of the right size, tighten the straps and don the mask again.
3. Place the mask over your face, then tighten each of the straps evenly to ensure a tight seal that remains comfortable and can be donned (put on) or doffed (taken off) with ease.
4. Don and doff the mask several times to ensure a consistent seal and comfortable fit.



DONNING THE MASK INSIDE OF A TOXIC ENVIRONMENT

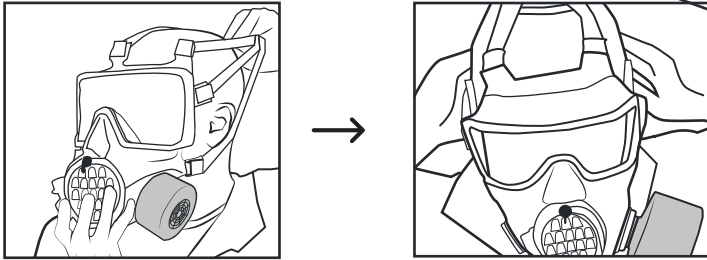
STEP 1

Prestage the head straps by folding them in front of the visor. Have your filter preinstalled onto the mask (not included with purchase). When donning, first close your eyes, hold your breath, and grab the mask.



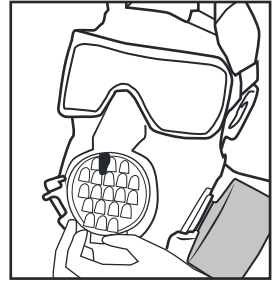
STEP 2

Secure the mask over your face, mouth and nose first. Maintain front pressure on the mask with one hand and pull the straps over the head using the other hand. Then tighten down the straps, starting from the bottom to the top.



STEP 3

Once the mask is tightened, exhale harshly by blowing the air out as hard as you can. This is to push out any air pockets that were made when initially putting on the mask and to clear out as much of the contaminated air as possible.

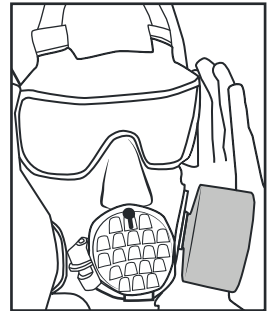


STEP 4

Perform a negative pressure test.

NEGATIVE PRESSURE TEST

The MIRA Safety CM-8M Gas Mask functions by drawing the user's inhaled air across an installed filter cartridge and then disposing of exhaled carbon dioxide through a one-way exhalation valve. To ensure the exhalation valve and other parts are in correct working order, negative pressure tests should be performed as part of regular maintenance according to the following steps:



1. Ensure proper fitment of the gas mask on its intended user.
2. Don (put on) the gas mask.
3. If a filter is not attached to the mask, completely cover the gas mask inhalation valve with the palm of your hand. If filter is installed, cover the intake area with the palm.
4. Take a deep breath. You won't breathe in much air because of the covered inhalation port.
5. If the mask is in good working order, you should feel negative pressure or a "sucking in" around the edges of the gas mask seal, as no air should be drawn in through the covered Inhalation Valve.
6. You may note a dimpling or depression around the edges of the gas mask seal, demonstrating negative pressure inside the mask.

NOTE

In addition to poor facepiece fit, leakage can result from loose breathing tube connections, improperly tightened filter elements, damaged or missing gaskets at the breathing tube and/or filter element connections, a damaged or missing exhalation valve, or other damaged respirator components. **DO NOT USE A DAMAGED OR LEAKING RESPIRATOR.** Make repairs and recheck respirator or remove from service and tag it for repairs by authorized personnel.



WARNING

IF A NEGATIVE PRESSURE TEST IS PERFORMED WITHOUT THE DESIRED RESULT (THAT IS, THE USER IS ABLE TO BREATHE FREELY WITH THE INHALATION VALVE COVERED), IMMEDIATELY DISCONTINUE USAGE OF THE AFFECTED EQUIPMENT UNTIL IT IS EVALUATED AND SERVICED.

DOFFING THE MASK

To take off the mask, simply pull from the bottom and pull up and away from the face. You may need to loosen the straps before doing so.

VISUAL INSPECTION

Perform a brief visual inspection of the MIRA Safety CM-8M Full Face Respirator before each use:

- ◆ Harness straps are securely attached.
- ◆ Inner mask is correctly located and secured.
- ◆ Exhalation valve cover is secure.
- ◆ All components and parts are visible and in good condition.

Once complete, inspect the exterior of the mask to ensure there are no deformations, punctures, or scratches.

Briefly remove the Exhalation Valve Cover to ensure the Exhalation Valve appears to be in good condition without any apparent cracking or deformation.

NOTE

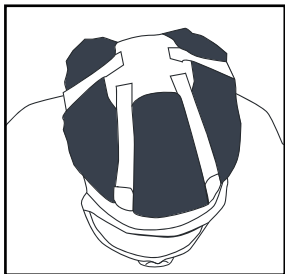
The mask may be stored with one or two 40 mm standard NATO Gas Mask Filter cartridges pre-installed.

PREPARATION FOR USE

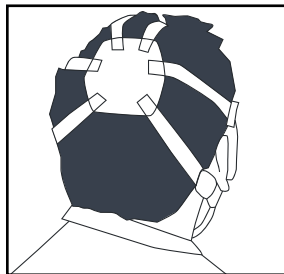
1. Perform a visual inspection of the MIRA Safety CM-8M Full Face Respirator (See Visual Inspection section of this manual).
2. If fitted, remove protective film from the gas mask's visor.
3. If desired, install the hydration system at this point.
4. If desired, install the spectacles (sold separately).
5. Ensure the inner oronasal cup of the mask is properly seated and not loose.
6. Remove the 40 mm Port Cover and screw in a 40 mm NATO standard canister until it is secured into the single filter port. Repeat this process for a second filter if desired. If no second filter is to be used, the 40 mm Port Cover must be left in place over the second port.
7. Don the gas mask:
 - a. Fully extend the straps of the head harness.
 - b. Spread the harness, place your chin into the facepiece, center the harness over the head, ensuring that the harness is sitting flat on the head with no twisted straps.
 - c. Ensure there is no hair or harness straps interfering with the Gas Mask's seal on the user's face (sideburns, beards, long hair, etc.).
 - d. Moderately tighten the harness straps.
 - e. Adjust the facepiece until it fits properly.
 - f. Tighten both neck straps first, then the temple straps evenly toward the back of the head.
 - g. Make sure to keep the harness centered on the back of the head for maximum stability. Adjust straps as necessary.
 - h. Exhale to ensure the Exhalation Valve opens as needed.
8. Quickly double-check your own (or another user's) mask to ensure the following:
 - a. Straps are straight.
 - b. Overhead straps aren't too high.
 - c. Center of the harness isn't too high.
 - d. No detectable separation from the face.
 - e. Head and hair aren't interfering with the seal.
9. Perform a negative pressure test to ensure the gas mask is properly sealed.

FACEPIECE DONNING ERRORS

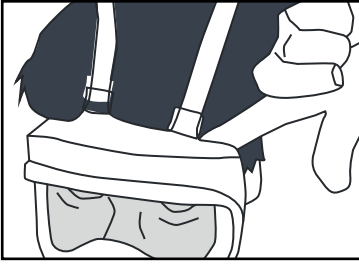
The following errors may occur:



Center strap too high.



Center of the harness too high.



Detectable separation from face or hair between seal (separation from face).



WARNING

RESPIRATORS SHALL NOT BE WORN WHEN CONDITIONS PREVENT A GOOD SEAL. SUCH CONDITIONS INCLUDE, BUT ARE NOT LIMITED TO, THE PRESENCE OF BEARDS, SIDEBURNS, OR FACIAL HAIR, OR CORRECTIVE LENSES WITH ARMS THAT EXTEND OVER THE EARS.

SCREWING IN THE CANISTER

The MIRA Safety CM-8M Full Face Respirator is designed for use with 40 mm NATO standard filter cartridges. To install your chosen canister,

1. Take the canister out of the packaging or storage container.
2. Completely remove the protective plugs and sealing strips from the canister.
3. Firmly and evenly screw the canister into the facepiece connector.
4. Seal the canister with the palm of your hand and inhale until negative pressure is generated (negative pressure test).
5. Hold your breath for a moment. The negative pressure should be maintained.
6. If not, retighten the straps.
7. Repeat this fit check twice.
8. Repeat this process to install a second filter cartridge if desired.



WARNING

IF YOU DETECT ANY CONTAMINANT ODOR OR TASTE, OR EXPERIENCE IRRITATION OF THE EYES, NOSE OR THROAT, THERE MAY BE EXPOSURE TO THE CONTAMINANT. RETURN TO FRESH AIR IMMEDIATELY. DETERMINE THE REASON FOR THE EXPOSURE AND TAKE APPROPRIATE CORRECTIVE ACTION BEFORE CONTINUING USE OF THE RESPIRATOR. FAILURE TO TAKE THE PROPER CORRECTIVE ACTION MAY RESULT IN EXPOSURE TO THE CONTAMINANT, WHICH COULD CAUSE SERIOUS INJURY OR DEATH.



WARNING

NEVER USE EXPIRED OR UNKNOWN FILTER CARTRIDGES. NEVER USE FILTER CARTRIDGES THAT HAVE NOT BEEN PROPERLY STORED. NEVER USE THIS GAS MASK IN ENVIRONMENTS WITH LESS THAN 19.5% OXYGEN. NEVER USE THIS GAS MASK IN UNVENTILATED CONTAINERS, TRENCHES, DUCTS, ETC.

USING THE INTEGRATED DRINKING SYSTEM WITH THE CM-8M CANTEEN

Your CM-8M Full Face Respirator features an integrated hydration system with included canteen. This system is compatible with popular Camelbak hydration systems when using a type-M adapter (not included). To connect the hydration system,

1. Disconnect the open end of the drinking tube from the docking port on the underside of the facepiece.
2. Inspect the open end of the drinking tube to ensure it is clean and the tube is free of debris.
3. Connect the open end of the drinking tube directly to the CM-8M canteen tube or to your chosen Camelbak hydration system via a type-M adapter.
4. The drinking tube must not be bent or crimped.
5. To drink, put the mouthpiece into your mouth.
6. It's best to remove the canteen from storage and hold it upside down, higher than the drinking tube connector.
7. For easy and quick drinking, you can "aerate" the bottle by blowing into it and then sucking in about four gulps of liquid. Repeat this process until drinking is completed.
8. Take the bottle down once you're finished drinking.



WARNING

DO NOT EXERT EXCESSIVE STRAIN WHILE USING THE DRINKING TUBE OR THE DRINKING DEVICE TO AVOID FACEPIECE LEAKS AND POTENTIAL EXPOSURE.



WARNING

CONNECT AND USE THE DRINKING SYSTEM ONLY IN A SAFE, NON-IDLH ATMOSPHERE. OTHERWISE, THE INSIDE OF THE DRINKING SYSTEM MAY BECOME CONTAMINATED. THE CAMELBAK DRINKING BAG MUST LIKEWISE BE CONNECTED TO THE SYSTEM IN A SAFE ENVIRONMENT BEFORE USE.

INSTALLING AND USING THE OPTIONAL CM-8M MICROPHONE (SOLD SEPARATELY)

The CM-8M Full Face Respirator is compatible with the MIRA Safety Gas Mask Microphone. This communication system installs directly over the gas mask Exhalation Valve using the parts included in the Microphone Kit. The microphone itself comes pre-assembled and can be installed without using any tools. To install your Gas Mask Microphone, follow these steps:

1. Locate the Exhalation Valve Cover on the bottom of the gas mask.
2. The Exhalation Valve Cover is secured in place by two tabs and pressure fit. Carefully adjust and pull the Exhalation Valve Cover until it comes free.
3. Place your Gas Mask Microphone module over the Exhalation Valve, ensuring that the opening is pointed to the REAR.
4. With slight manipulation, the Gas Mask Microphone will lock into place, replacing the Exhalation Valve Cover.



WARNING

DO NOT MANIPULATE OR ALTER ANY PART OF YOUR FACEPIECE WHILE INSTALLING THE OPTIONAL MICROPHONE. DO NOT MODIFY THE EXHALATION VALVE. IF YOU HAVE ANY DOUBT ABOUT THE MICROPHONE'S INSTALLATION, CONTACT MIRA SAFETY CUSTOMER SERVICE.

NOTE

MICROPHONE MUST BE REMOVED PRIOR TO CLEANING THE MASK.

INSTALLING AND USING THE OPTIONAL CM-8M SPECTACLES (SOLD SEPARATELY)

The CM-8M Full Face Respirator features integrated support for an optional spectacle system (sold separately). The CM-8M Spectacles are available through MIRA Safety. Please note that they are sold without lenses, and special diopter lenses must be made for optimum vision correction during use. To install your spectacles,

1. Ensure the lenses of your spectacles are clear and free of dust or debris. Wipe with a microfiber cloth if available.
2. At the center of the spectacles, above the lenses, is a bracket that will fit over the rectangular protruding tab on the upper inside of the gas mask. Once secured, the arms of the spectacle insert should be carefully guided to fit to the left and the right of the rectangular notch.
3. The arms are designed to flex slightly, allowing for a secure pressure-fit. Do not force them and do not damage the inside of the mask while installing.
4. Once the spectacle kit is installed, the arms should be snug and not protruding below the upper seal of the gas mask visor.
5. Test-fit the mask after installing the spectacles to ensure they're seated correctly and not obscuring your vision.



WARNING

DO NOT MANIPULATE OR ALTER ANY PART OF YOUR FACEPIECE WHILE INSTALLING THE OPTIONAL SPECTACLES. DO NOT MODIFY THE EXHALATION VALVE. IF YOU HAVE ANY DOUBT ABOUT THE INSTALLATION OF THE SPECTACLES, CONTACT MIRA SAFETY CUSTOMER SERVICE.



WARNING

INSTALL THE SPECTACLES ONLY IN A SAFE, NON-IDLH ATMOSPHERE. OTHERWISE, THE INSIDE OF THE GAS MASK MAY BECOME CONTAMINATED.

EMERGENCY USE

Proper training is essential for the operation of the CM-8M Full Face Respirator. This mask is designed to protect the face and eyes against a wide range of CBRN agents.

This mask can be used during entry into chemical, biological, radiological, and nuclear (CBRN) atmospheres not immediately dangerous to life or health. If at all possible, avoid environments that are immediately dangerous to life or health. Avoid environments where unknown contaminants may be present, and always use a filter cartridge that's certified for protection against known

NOTE

Operating temperature of the mask ranges from -22 °F to +158 °F (-30 °C to +70 °C). Lower or higher temperatures should be avoided if at all possible.

OPERATION IN EXTREME LOW TEMPERATURES

If possible, treat the inside of the lens with an anti-fogging agent to prevent it from fogging during use. Hardening of the Exhalation Valve is possible in extremely low temperatures. Be especially mindful of

OPERATION IN EXTREME HIGH TEMPERATURES

Take care to ensure the visor lens does not warp or deform during exposure to extreme high heat. If it begins to warp, leave the area immediately.



WARNING

IF YOU DETECT ANY CONTAMINANT ODOR OR TASTE, OR IRRITATION OF EYES, NOSE OR THROAT THAT SUGGESTS EXPOSURE TO THE CONTAMINANT, RETURN TO FRESH AIR IMMEDIATELY. DETERMINE THE REASON FOR THE EXPOSURE AND TAKE APPROPRIATE CORRECTIVE ACTION BEFORE CONTINUING USE OF THE RESPIRATOR. FAILURE TO TAKE THE PROPER CORRECTIVE ACTION MAY RESULT IN EXPOSURE TO THE CONTAMINANT WHICH COULD CAUSE SERIOUS INJURY OR DEATH.

TERMINATION OF USE

Termination of Use occurs when the user leaves the contaminated area and does not intend to re-enter. DO NOT remove the gas mask prior to performing a full decontamination procedure if possible. CBRN contaminants may adhere to the outer surface of the mask, which could lead to accidental

NOTE

Gas mask filters accumulate contaminants during exposure. Handle used gas mask filters with special care.

Exit the area requiring respiratory protection and, if necessary, proceed to decontamination. Once decontamination is complete,

1. Loosen the harness straps, starting with the bottom pair.
2. After loosening the bottom pair of harness straps, grip the gas mask around the base of the adapter, and pull forward slightly (DO NOT handle by the filter cartridge).
3. The mask should easily slide up and over your head.
4. If it does not, loosen the straps slightly more until it can be comfortably removed.
5. Carefully remove and dispose of the gas mask filter if you have not done so already.
6. Clean the Gas Mask if possible (see Cleaning section).



WARNING

DO NOT REMOVE THE GAS MASK, BREATHING TUBE, OR ADAPTER FROM THE GAS MASK WHILE IN A HAZARDOUS ATMOSPHERE EXCEPT IN AN EMERGENCY. REMOVING ANY OF THESE ITEMS WILL TERMINATE RESPIRATORY PROTECTION AND EXPOSE THE USER TO THE HAZARDOUS ATMOSPHERE, WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.



WARNING

DO NOT REMOVE THE GAS MASK, BREATHING TUBE OR FILTER CARTRIDGE PRIOR TO COMPLETING A FULL DECONTAMINATION PROCEDURE. REMOVING A MASK WITHOUT DECONTAMINATING WILL TERMINATE RESPIRATORY PROTECTION AND POTENTIALLY EXPOSE THE USER TO RESIDUAL CONTAMINANTS, WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.

CLEANING AND DISINFECTING

After exposure or use, the CM-8M Full Face Respirator should be cleaned and disinfected according to the following instructions:

1. Remove any accessories (including the optional hose) from the facepiece and clean them separately per manufacturer instructions.
2. Prepare a cleaning solution with neutral disinfectant cleaner according to the specifications of ECOLAB.
3. Immerse the facepiece in the solution. Make sure that all parts are wetted.
4. Completely remove the cleaning solution under running water.
5. Leave the facepiece to dry completely in a drying cabinet or in the open air. DO NOT expose it to direct sunlight. Do not shake the facepiece to remove water.
6. The same cleaning solution can be used to soak the optional hose assembly.

NOTE

The inner oronasal cup can be removed from and re-inserted into the mask for deep cleaning as needed.

Never use a gas mask that is not properly disinfected and decontaminated. In case of doubt, dispose of the Gas Mask in accordance with local regulations and use a new one.



WARNING

ALL VALVES, COVERS, AND FILTER ELEMENTS MUST BE CLEAN AND MUST SEAL PROPERLY BEFORE USE. FAILURE TO VERIFY THAT EACH ELEMENT SEALS PROPERLY COULD RESULT IN THE UNIT FAILING TO FUNCTION OR EXPOSE THE USER TO THE CONTAMINATED ATMOSPHERE, WHICH MAY CAUSE SERIOUS INJURY OR DEATH.



WARNING

FOLLOW THE REGULAR INSPECTION PROCEDURE EXACTLY. IF ANY DAMAGE OR OPERATIONAL MALFUNCTION IS NOTED, DO NOT USE THE RESPIRATOR. REMOVE THE RESPIRATOR FROM SERVICE, AND TAG IT FOR REPAIR BY AUTHORIZED PERSONNEL. FAILURE TO PROPERLY IDENTIFY DAMAGE OR MALFUNCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH.

CLEANING AND DISINFECTING THE DRINKING VALVE

1. Prepare a cleaning solution with a mild detergent and 1 liter of drinking water.
2. Fill the canteen with this solution.
3. The interior mouthpiece of the mask cannot be removed, so it should be gently cleaned with warm water.
4. Connect the canteen with the external drinking hose.
5. Raise the canteen upside down until the solution fills the hose.
6. Cap the hose with a clip and allow the solution to act for 3 minutes.
7. Open the hose, drain approximately half the liquid, then clip the hose and allow the solution to act for another 3 minutes.
8. Open the hose clip and drain the remaining solution.
9. Fill the canteen with clear drinking water.
10. Flush the canteen twice before disconnecting and drying with oil-free compressed air (10-20 psi).
11. Blow compressed air into the hose (10-20 psi) until it is completely dry.

STORAGE

The CM-8M Full Face Respirator must be stored in a dark, cool and dust-free place free from sudden temperature changes. The storage room should be ventilated regularly. Temperatures may vary between 10°C and 25°C within relative humidity up to 65%. Full face gas masks must not be exposed to radiant heat or sunshine. Fuels, solvents, lubricants and other inflammable substances, including chemicals, must not be stored with masks. Moreover, there must not be any electrical machines or appliances that produce sparks or discharges during operation (ozone creation).


MAINTENANCE

Regular maintenance and proper storage is required to ensure your mask continues to function properly over time. The following details are manufacturer recommendations. Observe national guidelines as well. Some maintenance jobs require substantial training:


- ◆ Tasks that can be completed by Gas Mask Owner with no additional training (“O”)
- ◆ Tasks that MUST be completed by a qualified Service Professional (“S”)

Work Required	Before Use	After Use	Every 6 Months	Every 2 Years	Every 5 Years
Visual Inspection	○				
Fit Check	○		○	○	
Clean Gas Mask		○			
Perform Negative Pressure Test	○		○	○	
Renew Mask/ New					S

Regular maintenance can be completed by the gas mask owner. Complete renewal including the replacement of key parts should **ONLY** be done by a qualified service professional. The CM-8M gas mask **MUST** be renewed every 5 years to ensure the product remains in proper working order.

 **WARNING**

THOROUGHLY CLEAN AND DECONTAMINATE THE GAS MASK AND BREATHING TUBE AFTER EACH USE. FAILURE TO CLEAN AND DECONTAMINATE THE EQUIPMENT MAY EXPOSE THE USER TO SUBSTANCES

 **WARNING**

THE GAS MASK MUST BE CLEANED THOROUGHLY SO THAT NO RESIDUES FROM SKIN CARE PRODUCTS REMAIN ON IT. OTHERWISE, THE ELASTICITY OF THE SEALING AREA CAN BE LOST AND THE GAS MASK WILL NO LONGER SEAL CORRECTLY. FAILURE TO HEED THIS WARNING CAN RESULT IN SERIOUS INJURY OR DEATH.

NOTE

IF THE RESPIRATOR IS (OR IS SUSPECTED OF BEING) CONTAMINATED BY A HAZARDOUS SUBSTANCE, THE CONTAMINANT MUST BE IDENTIFIED AND PROPERLY REMOVED, OR THE CONTAMINATED COMPONENT(S) MUST BE REPLACED BEFORE NEXT USE. DISPOSE OF ANY CONTAMINATED COMPONENT(S) IN ACCORDANCE WITH APPLICABLE REGULATIONS.

IF THE RESPIRATOR IS (OR IS SUSPECTED OF BEING) EXPOSED TO CBRN CLASS HAZARDOUS SUBSTANCES, HANDLE AND/OR DISPOSE OF THE UNIT IN ACCORDANCE WITH THE REQUIREMENTS OF YOUR CBRN RESPIRATORY PROTECTION PROGRAM.

NOTE

PRIOR TO HANDLING OR USING ANY CLEANING AGENTS MENTIONED, CONSULT THE MANUFACTURER'S MATERIAL SAFETY DATA SHEET (SDS) FOR PRECAUTIONS AND IMPORTANT INSTRUCTIONS.

DISPOSAL OF USED FILTER ELEMENTS

Filter elements must be removed and disposed of properly to avoid exposure to contaminants.

1. Handle the filter elements as potentially contaminated objects.
2. Dispose of the filter elements in accordance with federal, state, and local environmental regulations for hazardous waste.

Do not throw away used filter elements as ordinary waste.



WARNING

AFTER DECONTAMINATION, DISPOSE OF FILTER ELEMENTS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS. DO NOT THROW AWAY DAMAGED OR UNUSABLE FILTER ELEMENTS AS ORDINARY WASTE. IMPROPER DISPOSAL OF CONTAMINATED FILTER ELEMENTS MAY RESULT IN EXPOSURE TO CONTAMINANTS WHICH MAY CAUSE SERIOUS INJURY OR DEATH.

SERVICE AND REPLACEMENT PARTS

Regular inspection and maintenance may be completed by the gas mask owner, but the replacement of internal parts or respirator components should only be completed by a qualified service professional. For filters, parts or a replacement breathing tube, contact MIRA Safety Customer Support by calling 888-316-1462 or e-mailing support@mirasafety.com.

ONE-YEAR LIMITED WARRANTY

The manufacturer warrants this product against defects in materials and workmanship for a period of ONE (1) YEAR from the date of retail purchase by the original end-user purchaser (“Warranty Period”).

If there is a defect and a valid claim is received within the Warranty Period, the defective product can be replaced or repaired in the following ways: (1) Return the product to the manufacturer for repair or replacement at the manufacturer’s option. Proof of purchase may be required. (2) Return the product to the retailer where the product was purchased for an exchange (provided that the store is a participating retailer). Returns to a retailer should be made within the period of the retailer’s return policy for exchanges only (usually 30 to 90 days after sale). Proof of purchase may be required. Please check with the retailer for their return policy regarding returns beyond the time set for exchanges.

This warranty does not apply to accessories, attachments, or optional upgrades; defects resulting from normal wear and tear; accidents; damage during shipping; alterations; unauthorized use or repair; neglect, misuse, or abuse; or the failure to follow the instructions for proper care and maintenance of the product.

This warranty gives the original retail purchaser specific legal rights, and you may have other rights



MIRA[®]
SAFETY



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