

Frequently Asked Questions: 3M Filtering Facepiece/Disposable Respirator Storage Conditions and Shelf Life

Why is 3M adding shelf life information for the 3M™ Filtering Facepiece/Disposable Respirators?

The addition of shelf life information to our 3M NIOSH-approved respirators is a way to communicate to our customers the storage conditions and potential longevity of our respirators. Traditionally the life cycle of these respirators commonly used in industrial workplace applications, from date of manufacture to use by the customer, has been short in duration as they are disposable. However, with the increased attention to respirator stockpiling, many customers have requested information on storage conditions and shelf life. We hope that by adding this information to the respirator packaging it will encourage our customers to employ good practices such as appropriate long term storage, rotation of stock and inventory management.

In the United States, per 29 CFR 1910.134, OSHA has required that respirators be stored in the original packaging and away from contaminated areas, dust, sunlight, extreme temperatures, excessive moisture and damaging chemicals. Canada's CSA Standard Z94.4 has a similar requirement.

What 3M Filtering Facepiece/Disposable Respirators have a shelf life?

We are in the process of establishing a shelf life for all of our filtering facepiece respirators and several models do contain shelf life information and storage conditions. The shelf life determination for each respirator model will be product specific, based on material components and testing. As 3M evaluates shelf life, we are also doing so based on the respirator as a system, and not solely focusing on filter media. Once the shelf life has been established, it will be clearly indicated on the box with "Use by: MM/YYYY" (month/year) and should be located near the hourglass icon. If you need shelf life information on a specific product please contact 3M Technical Service at 1-800-243-4630 in the United States. In Canada contact 1-800-267-4414. (Other countries please contact your local 3M office.)

Why does the packaging for some 3M Filtering Facepiece/Disposable Respirators have shelf life information and other respirator packaging does not?

3M has been incorporating shelf life information on the packaging and in the *User Instructions* of many of our filtering facepiece/disposable respirators. You may note that certain 3M filtering facepiece respirators already contain storage and shelf life information. As 3M goes through the process of updating the packaging for the balance of our NIOSH-approved filtering facepiece respirators, shelf life and storage information will be added. Please refer to the product packaging as shelf life will be specific to the model of the filtering facepiece respirator. The transition to updated packaging/labeling in relation to the storage conditions and shelf life has been initiated. However, for a period of time, you may see product packaging in the market place with and without storage condition and shelf life information included/incorporated. If you have questions about a specific product please contact 3M Technical Service at 1-800-243-4630 in the United States. In Canada contact 1-800-267-4414. (Other countries please contact your local 3M office.)

How is the respirator's shelf life communicated?

The storage conditions and shelf life are usually found on the bottom or side of the primary package. Storage conditions are depicted as a thermometer for temperature range and an umbrella for humidity. The shelf life for the NIOSH-approved respirators is in the form of a "use by" (expiry) date such as "Use by: MM/YYYY" (month/year) and should be located near the hourglass icon. This information is also located on the label of the shipper case or corrugated box. An explanation of the icons and additional information regarding shelf life and storage conditions can be found in the *User Instructions* provided with the product. Please refer to the product packaging as shelf life is specific to each model of the filtering facepiece respirator.

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Here is an example of how storage conditions and shelf life will be depicted in the *User Instructions* and primary box respectively (this is an example only):

When stored in original packaging between temperatures from -4 °F (-20 °C) to +86 °F (+30 °C) and not exceeding 80% RH, the respirator may be used until the date specified on packaging located next to the "Use by Date" symbol.





Storage Maximum Relative Humidity



Use by Date

What happens if storage conditions are not met?

3M's goal is to help our customers ensure that filtering facepiece respirators stored for extended periods of time will meet the performance requirements to which they were approved and function as intended. When establishing a shelf life, 3M takes into account the filter media as well as the component parts of the respirator such as the strap and any staples. Therefore, we are confident that the respirators will meet performance requirements when the identified conditions are met.

However, when respirators are maintained outside of the established storage conditions, 3M cannot ensure that the respirators will meet performance requirements. In this event, many different kinds of changes can occur to the respirator including cosmetic changes and degradation of components such as headbands, nose foam and noseclips. Examples of cosmetic changes include discoloration of materials. Examples of degradation include crumbling of nose foam or breaking of headbands.

It is always critical that the respirator be inspected and a user seal check be conducted by the wearer per the *User Instructions*. If the person wearing the respirator cannot achieve a proper seal the respirator should not be used. Even for respirators within the stated shelf life and storage conditions, the respirator should be disposed of immediately upon observation of damaged or missing parts.

How do we know when not to use the respirator?

First refer to the packaging for a "use by" date. 3M's recommendation is that respirators be disposed of after the stated use by date. Always inspect the respirator and conduct a user seal check before use, in accordance with the *User Instructions*. If the person wearing the respirator cannot achieve a proper seal, then the respirator should not be used. Even for respirators within the stated shelf life, the respirator should be disposed of immediately upon observation of damaged or missing parts. For those respirators that have established shelf life but which packaging is not yet marked with a "use by" date, 3M recommends they no longer be used if 5 years has passed since the date of manufacture (if particulate only). For filtering facepiece particulate respirators with ozone, nuisance organic vapor, or nuisance acid gas relief, 3M recommends they no longer be used if 2 or 3 years have passed since the date of manufacture. See the <u>3M Filtering Facepiece Shelf Life</u> document for specific information.

If the respirator is not marked with shelf life information, how can I determine the age of the respirator?

For respirators that are not currently labeled with shelf life information, the date of manufacture can be determined from the label or printed information located on the primary box as well as the shipper case or corrugated box. For assistance in interpreting the date of manufacture, please call 1-800-243-4630 if in the U.S. In Canada call 1-800-267-4414. Other countries please contact your local 3M office.

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Should the respirator be disposed of after the shelf life has expired?

3M's recommendation is that the respirator be disposed of after the stated use by date has expired.

Will 3M take back respirators that have reached the end of their stated shelf life?

No, 3M will not accept returns of respirators on the basis of shelf life.

Will all 3M respirators have the same shelf-life?

No, not all 3M respirators will have the same shelf life. In making shelf life determinations, 3M takes into account the filter media as well as the components of the respirator. Components vary from model to model. See the 3M Filtering Facepiece Shelf Life document for model specific information.

How does 3M decide on the shelf life for filtering facepiece/disposable respirators?

The performance criteria used by 3M to establish shelf life includes NIOSH certification testing as well as additional evaluation of components. 3M evaluates materials and tests respirators that have been stored for short periods at elevated conditions (to mimic aging) as well as products which have been stored for longer periods of time within the recommended storage conditions. Respirators received from customer stockpiles have also been evaluated and taken into account in establishing the shelf life for various products.

For additional assistance in the US, contact 3M PSD Technical Service at 1-800-243-4630. In Canada, call 1-800-267-4414.

Bulletin Change Summary

For the most current 3M Technical Information available, please view this Bulletin electronically and click on the blue underlined links to view the relevant documents. Please read the entire Bulletin thoroughly.

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Updated hyperlinks throughout document and updated the format.

