

RE: Request for Cartridge Storage Information

To Whom It May Concern:

This letter is to acknowledge your request for storage information on MSA chemical and combination cartridges that are used with MSA Air-Purifying Respirators.

It is important to note that while MSA respirators and cartridges comply with all NIOSH requirements, there is not a standard and/or requirement for a stated storage life of airpurifying respirator cartridges. As a manufacturer, MSA recommends that cartridges be stored in a cool, dry, contaminant-free environment. Cartridges stored under these conditions can be expected to have little or no performance degradation.

However, because many users may not be able to control storage conditions, MSA has completed testing on Advantage and Comfo Chemical cartridges in simulated aging conditions. Based on this research, the following guidance is provided with regard to storage recommendations in which cartridges can be expected to perform to product requirements. It is possible that chemical cartridges may lose some of their efficiency in their ability to sorb contaminants. Humid storage conditions may cause cartridges to absorb moisture which adversely affects service time. This could result in a cartridge providing an adequate level of protection but a reduced service time when it is used.

The following table is based on cartridges stored in their original packaging and used soon after opening. The following guidance assumes that a broad user base in varied environmental and physical locations could have variation in storage conditions.

Chemical and Combination Cartridges	Coded by	Coding Method	Storage Life
Advantage & Comfo GMA or P100 Combo	Date of Manufacture	.The cartridge label is stamped with four characters "XXYY", where "XX" is the week of the year and "YY" is the year. A cartridge stamped 2011 would have been manufactured in the twentieth week of 2011.	3 years
Advantage & Comfo GMB or P100 Combo			3 years
Advantage & Comfo GMC or P100 Combo			3 years
Advantage & Comfo GMD or P100 Combo			3 years
Advantage & Comfo GME or P100 Combo			3 years
Advantage & Comfo GMI or P100 Combo			3 years
Comfo GMT or P100 Combo			3 years
Advantage & Comfo Mersorb or P100 Combo			3 years



MSA particulate only cartridges have an unlimited storage life.

Particulate Filters	Coded by	Coding Method	Storage Life
Advantage P100	Date of Manufacture.	The cartridge label is stamped with four characters "XXYY", where "XX" is the week of the year and "YY" is the year. A cartridge stamped 2011 would have been manufactured the twentieth week of 2011.	Unlimited
Comfo			
Flexi Filters			
Prefilters,			
Optifilter			
Ultra Filter			

The chemical cartridges for the MSA Air-Purifying Respirators are designed for relatively low concentrations of contaminants. The instructions for these respirators state that they should not be used against concentrations which produce atmospheres immediately dangerous to life or health. The major criterion for replacing the chemical cartridges on these respirators is to adhere to the revised OSHA regulation 1910.134. OSHA 1910.134 states "OSHA's new Respiratory Protection Standard 1910.134 requires that all cartridges have an ESLI (End-of-Service-Life Indicator), or a cartridge change (or change-out) schedule must be established." Users are encouraged to visit www.MSAnet.com/ResponseGuide for a cartridge service life calculator and information on respiratory protection and hazards.

Thank you for your continued interest in MSA products.

Best regards,

Mackenzie Peters Product Line Manager Air-Purifying Respirators

CC: John Raimondi