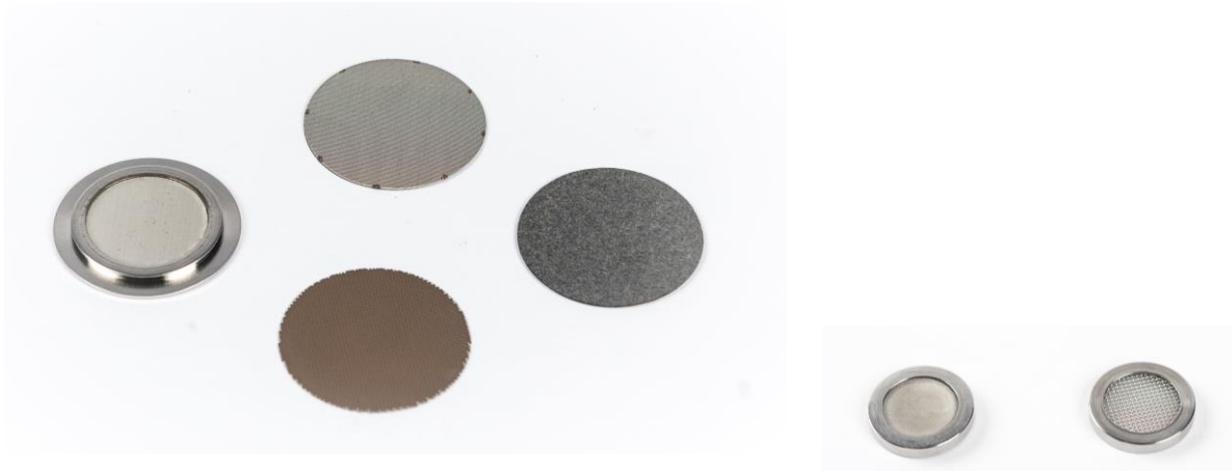


Filter Selection Data Sheet

for Novasina Water Activity Instruments



1. Intro

These specially designed filters shall be mounted in front of the sensor and used to provide protection against chemical contamination and degradation of the resistive electrolytic sensor element. As the inner part of the sensor consists of a liquid, volatiles which dissolve and dissociate are extremely dangerous and harm the sensor in a very short time.

Be aware that sensor failure due to chemical contamination by NOT using an appropriate chemical filter is not covered by warranty and replacement goes 100% on the user's account.

For that reason, it is inevitable to check sample composition for volatiles PRIOR to order the instrument. Your local Novasina representative will ask you those questions and will hand you this document for signing.

We fully understand if sample compositions and/or recipes cannot be shared with us but somehow we must gather the information, respectively ensure, that we can offer the best possible solution for a reliable, accurate and repeatable water activity measurement of your samples.

Many questions about changing interval were and are brought to our attention. Unfortunately, there is no precise guideline but a **rule of thumb**:

- If you do less or equal than 10 measurements a week, change filter every 6-12 months
- If you do more than 10 measurements a week, change filter every 3-6 months
- If instrument is in use, day and night, change filter every 2 months

Please read the **operating instruction manual** of the water activity meter as well to learn about the procedure how to find out the optimal chemical filter changing interval. It is important that the filter is changed from time to time as it is of saturation type. Once saturated, volatiles will pass through and **harm the sensor**.

Be aware that sometimes filter combinations must be used to get highest protection efficiency. As soon as ethanol is involved, our alcohol-resilient sensor (CM-3 or awSens-ELS) must be used. If ethanol is present in conjunction with other volatiles, select the alcohol-resilient sensor plus the respective filter(s) from the selection list.

Note that chemical filters will extend the measurement time as the water vapor has to pass through the filter but it will not affect the measurement value.

If you have doubts about the procedure or feel unsure how to work that out, please do not hesitate to contact your local Novasina representative.

Filter Selection Data Sheet

for Novasina Water Activity Instruments

2. What to Take When?

Volatile	Filters				Sensor
	eVC-21 or eVC-18	eVC-26	eVC-21/eVALC or eVC-18/eVALC	Redox	CM-3 / awSens-ELS
Acetic acid (eg. mustard)	X				
Alcohols, primary, secondary				X	
Amines		X			
Aroma, light (fruit, yeast, hop, herbs)				X	
Aroma, strong (like spices, herbs),			X		X
Butyric acid	X				
Carboxylic acids (aliphatic)	X				
Chlorine	X				
Chloroform		X			
Essential oil (menthol, etc)			X		X
Ethanol (ethyl alcohol)					X
Formaldehyde	X				
Formic acid	X				
Furanes (bread aromas)				X	
Glycerin				X	
Hydrocarbons, aromatic		X			
Hydrogen halides	X				
Hydrogen peroxide	X				
Hydrogen sulfide	X				
Ketones (eg. acetone or MEK)				X	
Lactic acid	X				
Nicotine		X			
Nitrogen oxides		X			
Oil fog		X			
Ozone		X			
Perchlor-, trichlorethylene		X			
Perfumes, fragrances				X	X
Phenol				X	
Propylen-glycol, polyethylen-glycol				X	
Sulfur dioxide	X				
Sulphuric acid	X				

I confirm that I have verified all samples to be measured on the water activity meter and marked the critical components / volatiles in the table above. If anything is marked, I confirm that any of the listed volatiles are present in the samples

Date: _____

Name/Position: