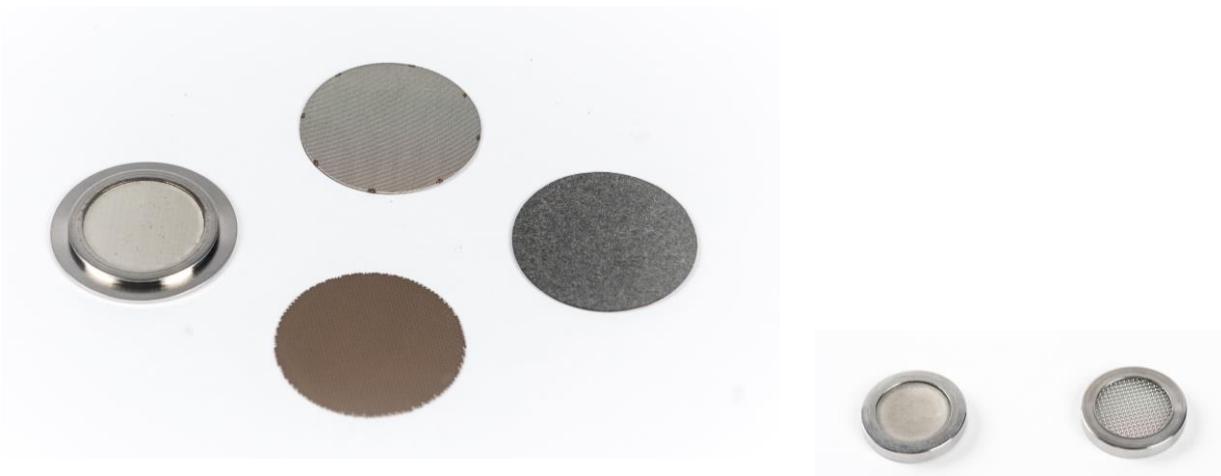


Filter Selection Data Sheet

for Novasina Water Activity Instruments

novasina
The Art of Precision Measurement

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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.

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2. What to Take When?

	Filters				Accessories	Sensor
Volatile	eVC-21 or eVC-18	eVC-26	eVC-21/eVALC or eVC-18/eVALC	Redox	Regeneration-Kit	CM-3 / awSens-ELS
Acetic acid (eg. vinegar, mustard etc)	X					
Alcohols, secondary				X		
Amines		X				
Aroma, light (fruit, yeast, hop, herbs)				X	X	
Aroma, strong (like spices, herbs),			X		X	
Butyric acid	X					
Essential oil (menthol, etc)			X		X	
Ethanol (ethyl alcohol)						X
Formic acid	X					
Furanes (bread aroma)				X		
Glycerin				X		
Hydrocarbons, aromatic		X				
Hydrogen halides	X					
Hydrogen peroxide	X					
Hydrogen sulfide	X					
Ketones (eg. acetone or MEK)				X		
Nicotine		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:

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3. Which filter and sensor for which instrument?

Instrument	eVC-21 P/N 1111001	eVC-26 P/N 1111003	eVALC P/N 1110995	Redox* P/N 1117212	eVC-18 P/N 2601662	eVC-18/eVALC combo P/N 2601724	Redox for LM neo P/N 2601330	Regeneration- Kit P/N 2601962	CM-3 P/N 2600536	awSens-ELS P/N 2601615
LabMaster-aw neo					X	X	X	X		X
LabMaster-aw basic, standard, advanced	X	X	X	X				X	X	
LabTouch-aw	X	X	X	X				X	X	
LabSwift-aw	X	X	X	X				(X)		
LabStart-aw	X	X	X	X				(X)		

*Note: If a redox filter P/N 1117212 is installed, any secondary filter can be mounted due to missing space in the measurement chamber

(X): It is possible to use the regeneration kit with the LabSwift-aw and LabStart-aw. However, due to the lack of temperature control, the efficiency of the regeneration at room temperature is quite low. If possible, put the instrument in an oven at 30-40°C and proceed with regeneration.