

Preservatives, Sorbic Acid

Description

Wine, as well as other food stuffs, can be stabilized or preserved with permitted substances. Benzoic acid or sorbic acid are some of them. Preservation can be appropriate when food, particularly wine, are not stored properly. In the sales shelves the wine bottles often stay upright and at too high storing temperature.. Micro organisms and/or oxygen can find their way into the bottle and spoil the wine.

Some countries have fixed a maximum accepted limit, other countries or importers require preservative free products. The determination of these quantity limits or the evidence that the wine is free of sorbic acid can be performed optimally with the system offered by **SunChrom**.

The strong points of the method

SunChrom offers a special column and a special system for the determination of preservatives such as benzoic acid or sorbic acid. The calibration is made with the wine standards of "Deutscher Weinchemiker e.V.", containing 200 mg/L sorbic acid. The system can also be calibrated with aqueous standard of own production.

The users of a SunChrom ORGANIC ACID SCREENING system can perform this determination with the main column by replacing the pre-column through a union with low dead volume. Only the wave length of the UV detector has to be changed into 254 nm.

Since the main column is very long, the analysis takes approx. 30 min: Fig. 1. The detection limit is about < 1 mg/L.

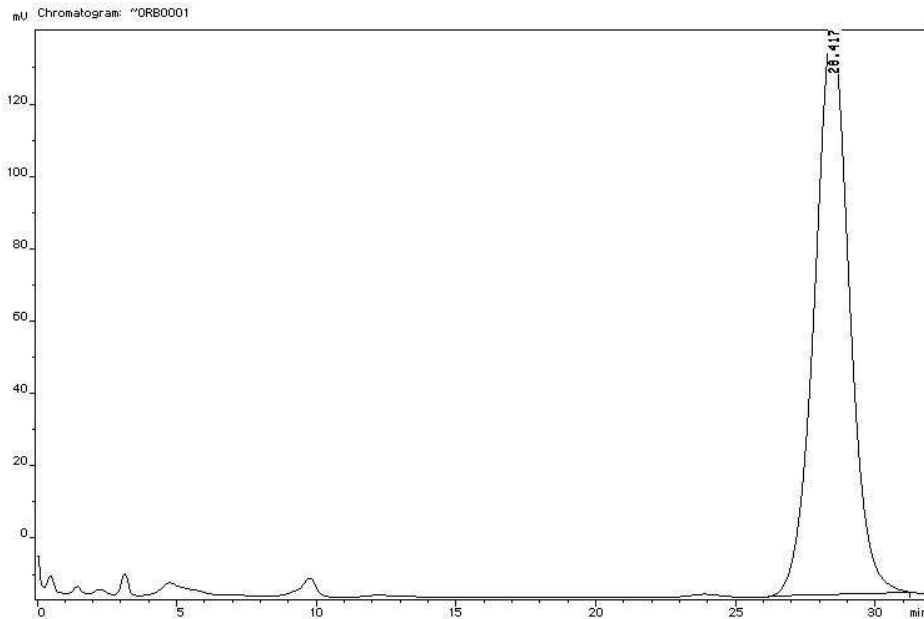


Fig. 1 – Determination of sorbic acid with the main column of the ORGANIC ACID SCREENING system

It is more effective and much more faster with the newly developed high performance separation column by SunChrom. The separation then requires only 10 minutes. The peak for sorbic acid is much narrow and very high. The detection limits is than reduced to the mg/L level without any sample preparation.

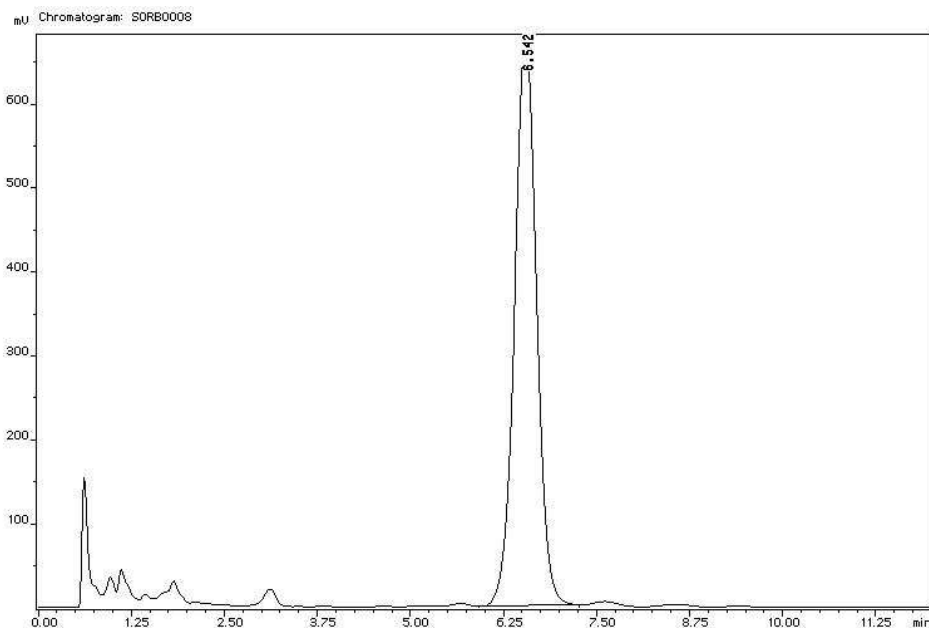


Fig. 2 – Determination of sorbic acid with the high performance column of SunChrom



Ordering information

Art.-No.	Short description
458-190.004	complete system for determination of preservatives, particularly sorbic acid in wine, sparkling wine and other beverage
969-190.111	pre-column cartridge 4 x 10 mm
969-190.112	cartridge holder
969-190.113	cartridge holder incl. 2 capillary connecting pieces
969-190.201	main column 300 x 4,6 mm
458-190.202	special main column 100 x 4,6 mm
969-190.320	SS sieves, 5 µm (10)
969-190.321	Teflon seals (10)
969-190.325	glass fiber filters (10)
969-190.332	SS frit 1,9 mm with PEEK ring 0,25" OD
969-190.333	SS frit 4,6 mm with PEEK ring
969-190.340	capillary connecting piece 25 cm
969-190.341	capillary connecting piece 10 cm
969-195.425	PEEK capillary 1/16" x 0,25 mm (1 m)
969-195.522	PEEK finger tight fitting
189-7010-040	stator for injection valve 7010 (new)
189-7010-039	rotor seal for injection valve 7010
458-195.079	stator for 7010 – replacement part –
189-7750-038	stator for injection valve 7739 (new)
189-7750-016	rotor seal for injection valve 7739
458-195.038	stator for 7739 – replacement part -

We reserve the right to change specifications, design or price without advance notice.

