

ACETIC ACID

UV Method
RX MONZA

FOR FULL PRODUCT DETAILS, PLEASE REFER TO THE KIT INSERT.

INTENDED USE

For the quantitative *in vitro* determination of Acetic Acid in wine, beer, and fruit juices. This product is suitable for use on the RX **monza** analyser.

Cat. No.

AT 7304	R1a.	Buffer	1 x 103 ml
5 x 33 tests	R1b.	Substrate	5 x 20 ml
	R1c.	Enzyme Reagent 1	1 x 1.1 ml
	R2a.	Enzyme Reagent 2	4 x 10 ml
	R2b.	Diluent	1 x 50 ml
	CAL	Acetic Acid Standard	1 x 10 ml

STABILITY AND PREPARATION OF REAGENTS

R1. Buffer / Substrate / Enzyme Reagent 1

Reconstitute 1 vial of Substrate R1b with **20 ml** of Buffer R1a. Stable for 2 weeks at +2 to +8°C. Before use add **200 µl** of Enzyme Reagent 1 (R1c). Stable for 1 day at +2 to +8°C.

R2. Enzyme Reagent 2

Reconstitute 1 vial of Enzyme Reagent 2 (R2a) with **10 ml** of diluent (R2b). Stable for 5 days at +2 to +8°C.

CAL. Acetic Acid Standard

Contents ready for use. Stable up to the expiry date when stored at +2 to +8°C.

MATERIALS PROVIDED

Buffer / Substrate / Enzyme Reagent 1
Enzyme Reagent 2 / Diluent
Acetic Acid Standard

MATERIALS REQUIRED BUT NOT PROVIDED

0.9% NaCl Solution

PROCEDURE

Select AA in the Run Test Screen and carry out a water blank as instructed.

Pipette into a cuvette:

	Reagent Blank S0	Standard S1-S4	Sample
DDH ₂ O	8 µl	-	-
Standard	-	8 µl	-
Sample	-	-	8 µl
Reagent 1	600 µl	600 µl	600 µl

Mix, incubate for 3 minutes at +25°C.

Insert the cuvette in the RX **monza** flowcell folder when prompted for Sample Blank and press Read.

Reagent 2	200 µl	200 µl	200 µl
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Mix, incubate for 10 minutes at +25°C.

Insert the cuvette in the RX **monza** flowcell folder when prompted for Sample and press Read.

CALIBRATION

A standard series should be prepared by diluting the standard as detailed on the lot specific value sheet.

SPECIFIC PERFORMANCE CHARACTERISTICS

The following performance data were obtained using a RX **monza** analyser.

LINEARITY

The method is linear up to a concentration of the standard. In the event of a rerun the linearity is extended to standard concentration x3.

SENSITIVITY

The minimum detectable concentration of Acetic Acid with an acceptable level of precision was determined as 0.244 g/l.

PRECISION

Within run precision

	Level 2	Level 3
Mean (g/l)	0.36	0.75
SD	0.017	0.022
CV(%)	4.71	2.94
n	20	20

Between run precision

	Level 2	Level 3
Mean (g/l)	0.36	0.75
SD	0.021	0.021
CV(%)	5.67	2.78
n	20	20

CORRELATION

The Randox method (Y) was compared to another commercially available method (X). Linear regression analysis of the data resulted in the following equation:

$$Y = 1.079X - 0.060$$

and a correlation coefficient $r = 0.9910$

44 samples were analysed spanning the range 0.288 to 1.247 g/l.

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