

ETHANOL (EtOH)

RX MONZA
WINE ONLY

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

INTENDED USE

For the quantitative analysis of ethanol in wine. This product is suitable for use on the RX **monza** analyser.

FOR THE ANALYSIS OF FOOD AND WINE. Not suitable for diagnostic procedures.

Cat. No.

DA 4015	R1. Ethanol Buffer	2 x 16.9 ml
2 x 21 t	R2. Ethanol Enzyme Reagent	2 x 8 ml

SAMPLE COLLECTION AND STORAGE

Wine. Dilute samples 1 + 49 with distilled water prior to assay.

STABILITY AND PREPARATION OF REAGENTS

R1. Ethanol Buffer

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

R2. Ethanol Enzyme Reagent

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

Avoid prolonged exposure of the reagent at temperatures higher than +25°C.

MATERIALS PROVIDED

Ethanol Buffer
Ethanol Enzyme Reagent

MATERIALS REQUIRED BUT NOT PROVIDED

Radox Ethanol Calibrator/Control Set (Cat. No. DA 2703)

PROCEDURE

Select Eth in the Run Test screen and carry out a water blank as instructed.

Pipette into a test tube:

	Reagent Blank S0	Standard S1	Sample
ddH ₂ O	40 µl	-	-
Standard	-	40 µl	-
Sample	-	-	40 µl
Reagent 1	800 µl	800 µl	800 µl

Mix well and incubate for 5 min at +25°C. Then add:

	Reagent 2	300µl	300µl	300µl

Mix and aspirate into the RX Monza.

CALIBRATION

We recommend Radox Ethanol Calibrator/Control Set.

QUALITY CONTROL

A stable wine check should be assayed daily. Values obtained should fall within a predetermined range, for this check wine. If these values fall outside the range and repetition excludes error, the following steps should be taken:

1. Check instrument settings and light source.
2. Check cleanliness of all equipment in use.
3. Check water, contaminants i.e. bacterial growth may contribute to inaccurate results.
4. Check expiry date of kit and contents.
5. Contact Radox Laboratories Customer Technical Support, Northern Ireland +44 (0) 28 9442 2413.

SPECIFIC PERFORMANCE CHARACTERISTICS

The following Ethanol performance characteristics were obtained using a RX **monza** analyzer.

ASSAY RANGE

The range of this assay is 26.4 – 515 mg/dl (1319-25771 mg/dl in wine sample).

SENSITIVITY

The minimum detectable concentration of ethanol in wine (diluted 1+49) with an acceptable level of precision was determined as 13.2 g/l (1319 mg/dl).

PRECISION

Within Run precision

	Level 1	Level 2
Mean(mg/dl)	9250	12700
S.D	157	335
C.V(%)	1.69	2.64
n	20	20

Total Run precision

	Level 1	Level 2
Mean(mg/dl)	9250	12700
S.D	29	780
C.V(%)	3.55	6.16
n	20	20

CORRELATION

This method (Y) was compared with another commercially available method (X) and the following linear regression equation obtained:

$$Y = 0.970X + 3.54$$

and a correlation coefficient of $r = 0.986$

41 wine samples were analysed spanning the range 4400 to 14134.5 mg/dl.

Revised 12 Mar '12 bm