

ETHANOL (EtOH)

RX ALTONA

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

INTENDED USE

For the quantitative determination of ethanol in wine. This product is suitable for use on the Rx **altona** analyser.

Cat. No.

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

SAMPLE PREPARATION

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 Ethanol wine in the Test Screen. Then select Run Calibration or Run Sample 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 minutes at +25°C. Then add:

Reagent 2	300µl	300µl	300µl
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Mix and aspirate into the RX **altona**.

CALIBRATION

We recommend Radox Ethanol Calibrator. Both the negative and 100 mg/dl alcohol calibrators should be used to calibrate the assay.

QUALITY CONTROL

Radox Ethanol Calibrator/Control Set is recommended for daily quality control. Two levels of controls should be assayed at least once a day. Values obtained should fall within a specified range. 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 reaction temperature.
5. Check expiry date of kit and contents.
6. Contact Radox Laboratories Technical Services, Northern Ireland + 44 (0) 28 9445 1070.

Quality control requirements should be determined in conformance with government regulations or accreditation requirements.

SPECIFIC PERFORMANCE CHARACTERISTICS

The following Ethanol performance data was obtained using a Rx **altona** analyser in flow cell mode running at a temperature of +37°C.

LINEARITY

The ethanol assay is linear to 500.1 mg/dl (31.68% v/v in wine sample).

SENSITIVITY

The minimum detectable concentration of ethanol with an acceptable level of precision was determined as 10.6 mg/dl (0.67% v/v in wine sample).

PRECISION

Intra Assay precision

	Level 1	Level 2	Level 3
Mean (mg/dl)	121.5	188.4	231.5
S.D	1.929	2.224	7.612
C.V(%)	1.59	1.18	3.29
n	20	20	20

Inter Assay precision

	Level 1	Level 2	Level 3
Mean (mg/dl)	124.1	192.2	237.6
S.D	2.088	4.636	9.112
C.V(%)	1.68	2.41	3.84
n	20	20	20