

CALIBRATION STANDARDS FOR THE DETERMINATION OF SULFUR DIOXIDE IN GRAPE JUICE AND WINE

PRODUCT

Product no. 4C500

PRINCIPLE OF MEASUREMENT

This kit contains 6 bottles containing 74 mg of Sodium metabisulfite (SMS) ($\geq 99\%$ purity) to make a calibration for the automated discrete analyser kits. These standards are suitable for the calibration of Vintessential test kits 4B190 and 4B200 on automated discrete analysers.

CONTENTS

The kit includes the following reagents:

Reagent	Preparation	Quantity	Stability
Standard	Dissolve in distilled water (not provided)	6 x 74 mg	Stable for 2 years or the expiry date, whichever occurs first. Once resuspended in water, the solution is stable for 1 week if stored at 4°C.

STORAGE

- Store in refrigerator
- Do not freeze
- Keep containers tightly closed

SAFETY

- Wear safety glasses
- Wear protective gloves
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources
- Refer to the Safety Data Sheets

STANDARD PREPARATION

Prepare Master stock (500mg/L)

Dissolve entire contents of 1 vial of SMS into 100ml volumetric flask with distilled water to make master stock. Use this standard to prepare your calibration standards as detailed in **Table 1** and **2**.

Prepare working stocks for 4B190

Prepare working stocks using table 1 . Total volume prepared 10mL

Concentration mg/L	Volume of Master stock/mL	Volume of water/mL
0	0	10
20	0.4	9.6
40	0.8	9.2
50	1	9

Table 1. Details on volumes needed to prepare calibration reagents for Free sulphur analysis for use with discrete analysers.

Prepare working stocks for 4B200

Prepare working stocks using table 2 -total volume prepared 10mL

Concentration mg/L	Volume of Master stock/mL	Volume of water/mL
50	1.0	9.0
100	2.0	8.0
150	3.0	7.0
200	4.0	6.0
250	5.0	5.0

Table 2. Details on volumes needed to prepare calibration reagents for total sulphur analysis for use with discrete analysers.