



**Title:** Dosing of Sodium Metabisulphite Solution in Potable Water

<b>SOP No.:</b>		<b>Revision No.:</b>	00
<b>Effective Date:</b>		<b>Supersedes</b>	Nil
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**1.0 OBJECTIVE:**

To lay down a procedure for Dosing of Sodium Metabisulphite Solution in Potable Water.

**2.0 SCOPE:**

This SOP is applicable for Dosing of Sodium Metabisulphite Solution in Potable Water.

**3.0 RESPONSIBILITY:**

Officer / Executive – Engineering

**4.0 ACCOUNTABILITY:**

Head – Engineering

**5.0 DEFINITION:**

**Potable water (Drinking water)** is used for drinking purpose and stored in water Cooler through Aqua Guard Water Purification system.

**6.0 PROCEDURE:**

**6.1 GENERAL INSTRUCTIONS:**

**6.1.1** Ensure the Sodium Metabisulphite Material for its “**APPROVED**” Status Label.

**6.1.2** Not to use unapproved Material.

**6.1.3** Always use fresh Sodium Metabisulphite Solution.

**6.1.4** Mention the Validity of prepared solution on Status Label.

**6.1.5** Wear Hand Gloves while handling the Chemicals.

**6.1.6** Use Calibrated weighing balance for solution preparation.

**6.2 SOLUTION PREPARATION:**

**6.2.1** Calculate the quantity of Sodium Metabisulphite for 4% of solution according assay value as per formula mentioned below.

$$\text{Quantity of chemical used} = \frac{\text{Solution Qty. X \% of Solution}}{\text{Chemical Assay Value}}$$



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**6.2.2** Measure by weighing of Sodium Metabisulphite and transfer it into SMBS dosing tank Add 40 Liter of RO Water to make 4% NaOCl solution.

**6.2.3** Mix up solution thoroughly in SMBS dosing tank and close the lid.

**6.2.4** Set the Dosing Pump flow rate by rotating Knob at the rate 2.88 Liter/Hr. i.e. approx 4ppm.

**6.2.5** Check chlorine ppm level by chlorine test indicator after regular interval of time when plant in operation it should be maintained Zero/Nil.

**6.2.6** Record the observations in “**Dosing of Sodium Metabisulphite Solution Record**” as shown in **Annexure-I**.

**6.3 Frequency for Solution Preparation:** Every Shift / 12 Hrs.

**7.0 ABBREVIATIONS:**

No.	Number
QA	Quality Assurance
Ltd.	Limited
RO	Reverse Osmosis
kg	Kilogram
Hr	Hour
SMBS	Sodium Metabisulphite

**8.0 ANNEXURES:**

<b>ANNEXURE No.</b>	<b>TITLE OF ANNEXURE</b>	<b>FORMAT No.</b>
Annexure-I	Dosing of Sodium Metabisulphite Solution Record	

**9.0 DISTRIBUTION:**

- Controlled Copy No. 01                      Head Engineering
- Master Copy                                      Quality Assurance Department

**10.0 REFERENCES:**

Not Applicable



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**11.0 REVISION HISTORY:**

<b>Revision No.</b>	<b>Change Control No.</b>	<b>Details of Changes</b>	<b>Reason of Changes</b>	<b>Effective Date</b>	<b>Done By</b>

