

# PHARMA DEVILS

ENGINEERING DEPARTMENT

Title: Dosing of Sodium Metabisulphite Solution in Potable Water

SOP No.:	Revision No.:	00
Effective Date:	Supersedes No.	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 ABBREVIATIONS:**

No. Number

QA Quality Assurance

Ltd. Limited

RO Reverse Osmosis

kg Kilogram Hr Hour

SMBS Sodium Metabisulphite

### 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.



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**Solution Qty X % of Solution** 

**Quantity of chemical used =** 

**Chemical Assay Value** 

- **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 ANNEXURES:

ANNEXURE No.	TITLE OF ANNEXURE	FORMAT No.
Annexure-I	Dosing of Sodium Metabisulphite Solution Record	

#### **8.0 DISTRIBUTION:**

• Controlled Copy No. 01 Head Engineering

• Master Copy Quality Assurance Department

## 9.0 REFERENCES:

Not Applicable

### 10.0 REVISION HISTORY:

### **CHANGE HISTORY LOG**

Revision No.	Details of Changes	Reason for Change	Effective Date	Updated By



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# ANNEXURE – I



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# DOSING OF SODIUM METABISULPHITE SOLUTION RECORD

Location: Source: Borewell

**Frequency for Solution Preparation:** Every shift / 12 Hrs.

Date	Purity/Assay of SMBS	Qty. of SMBS Taken (For 4%)	Qty. of Water Added (For 4%)	Total solution Prepared for Dosing (40 Liters)	Dosing Rate (NLT 2.88 Ltr./Hr.)	Discard Qty. (Ltr.)	Done By (Sign & Date)	Checked By (Sign & Date)