# Sobiclip 1000 Tablet

## Sodium Bicarbonate (1000 mg) Tablet

Category: Antacid / Alkalizing Agent Dosage Form: Tablet

## **Description:**

Sodium Bicarbonate is a widely used antacid and alkalizing agent that works by neutralizing stomach acid and increasing the pH of the stomach contents. It is commonly used to relieve symptoms of heartburn, acid indigestion, and upset stomach. The 1000 mg dosage provides effective acid neutralization and can also be used as a systemic alkalizer to treat metabolic acidosis.

**Composition (Per Tablet):** 

- Sodium Bicarbonate: 1000 mg
- Excipients: Suitable excipients for tablet formulation.

**Indications:** 

Sodium Bicarbonate is used to treat the following conditions:

- 1. Heartburn and Acid Indigestion:
  - Provides symptomatic relief from heartburn, acid reflux, and acid indigestion by neutralizing excess stomach acid.
- 2. Peptic Ulcers:

- Used as an adjunctive treatment for peptic ulcers to help alleviate symptoms such as stomach pain or discomfort.
- 3. Metabolic Acidosis:
  - Sodium Bicarbonate is used in the treatment of metabolic acidosis to correct the acidbase balance in the body. It helps to raise blood pH in conditions like chronic kidney disease, renal tubular acidosis, and diabetic ketoacidosis.
- 4. Urinary Alkalinization:
  - In certain conditions, Sodium Bicarbonate can be used to alkalize urine to promote the excretion of certain drugs or toxins from the body, such as in the treatment of urinary tract infections or overdose of certain medications.

**Dosage and Administration:** 

- Adults:
  - The typical dosage for acid indigestion or heartburn is 1 tablet (1000 mg) taken orally, as needed, after meals or before bedtime. Do not exceed 7 tablets in a 24-hour period unless directed by a healthcare provider.
- For Metabolic Acidosis or Alkalinization:
  - The dose for metabolic acidosis or urinary alkalinization is individualized based on the

severity of the condition and the patient's blood pH levels. A healthcare provider should determine the appropriate dosage.

- Children:
  - The safety and effectiveness of Sodium Bicarbonate in children below the age of 12 years should be determined by a healthcare professional.

# **Mechanism of Action:**

- 1. Antacid Effect:
  - Sodium Bicarbonate acts as an antacid by neutralizing hydrochloric acid (HCl) in the stomach, raising the pH of the stomach contents and relieving symptoms of heartburn and indigestion.
  - The reaction produces carbon dioxide (CO<sub>2</sub>) and water, which relieves the irritation caused by excess stomach acid.
- 2. Alkalinizing Agent:
  - In systemic conditions like metabolic acidosis, Sodium Bicarbonate helps to increase blood pH by releasing bicarbonate ions, which act as buffers to neutralize excess hydrogen ions (H<sup>+</sup>), thereby restoring acid-base balance.
- 3. Urinary Alkalinization:
  - Sodium Bicarbonate can alkalinize urine, which helps in increasing the excretion of acidic substances, such as uric acid or certain drugs, by making the urine less acidic.

# **Contraindications:**

- Hypersensitivity:
  - Contraindicated in patients with a known hypersensitivity or allergic reaction to Sodium Bicarbonate or any of the excipients in the formulation.
- Severe Kidney Impairment:
  - Not recommended for individuals with severe renal failure or kidney disease as it may lead to an accumulation of sodium and bicarbonate in the body, leading to fluid retention and alkalosis.
- Metabolic or Respiratory Alkalosis:
  - Contraindicated in patients with metabolic alkalosis or respiratory alkalosis, as this may worsen the condition.
- Hypertension or Edema:
  - Use with caution in patients with high blood pressure (hypertension) or fluid retention (edema) due to the high sodium content.

Warnings and Precautions:

- 1. Electrolyte Imbalance:
  - Sodium Bicarbonate may cause electrolyte imbalances like hypernatremia (high sodium levels) and hypokalemia (low potassium levels), particularly when used in large amounts or for prolonged periods. Monitoring of electrolytes is advised.
- 2. Pregnancy and Lactation:

- Sodium Bicarbonate should be used during pregnancy and lactation only when clearly needed. Consult a healthcare provider for personalized recommendations.
- 3. Chronic Use:
  - Long-term use of Sodium Bicarbonate as an antacid should be avoided, as it can lead to systemic alkalosis, sodium retention, and kidney problems. Prolonged use may also reduce the stomach's ability to digest food properly by increasing pH excessively.
- 4. Gastrointestinal Disorders:
  - Caution should be exercised in individuals with gastric ulcers or gastritis, as the carbon dioxide produced may lead to bloating and discomfort. In patients with gastrointestinal obstruction, the use of sodium bicarbonate may increase the risk of complications.

**Adverse Effects:** 

- Common Side Effects:
  - Bloating, belching, or gas due to the release of carbon dioxide.
  - Nausea or stomach cramps.
  - Fluid retention, swelling, or edema due to sodium content.
  - Diarrhea or constipation (less common).
- Serious Side Effects:
  - Hypernatremia (high sodium levels): May cause symptoms such as thirst, high blood

pressure, headache, or confusion.

- Metabolic alkalosis: Symptoms may include muscle twitching, nausea, vomiting, and irregular heartbeat.
- Kidney impairment: Sodium Bicarbonate can worsen kidney function in patients with renal disease, causing complications like renal failure.

## **Drug Interactions:**

- 1. Medications That Affect Electrolytes:
  - Diuretics, especially thiazide diuretics, can increase the risk of electrolyte imbalance (e.g., hypokalemia) when used with Sodium Bicarbonate.
- 2. Medications for Heartburn or Acid Indigestion:
  - Sodium Bicarbonate can affect the absorption of certain medications due to changes in stomach pH. For example, drugs like iron supplements, tetracycline antibiotics, and antifungal medications may have reduced absorption.
- 3. Corticosteroids and Sodium Retention:
  - Corticosteroids and other medications that promote sodium retention may increase the risk of fluid retention and hypertension when used with Sodium Bicarbonate.
- 4. Aspirin:
  - Sodium Bicarbonate can alter the pH of the urine, which may

influence the excretion of aspirin or other medications metabolized by the kidneys.

**Storage Instructions:** 

- Store in a cool, dry place at room temperature (15–30°C).
- Keep the medication in its original packaging to protect it from moisture.
- Keep out of the reach of children.

**Key Points for Use:** 

- Take as directed for relief of heartburn or acid indigestion.
- Avoid prolonged use of antacids without medical supervision.
- Monitor for signs of electrolyte imbalances, particularly in patients with kidney disease or those on other medications affecting sodium levels.
- Consult a healthcare provider if symptoms persist or worsen despite treatment.

Manufactured in India for:

