

SODIUM BISULPHITE SOLUTION

Description

Slightly yellow, transparent liquid.

Uses

Sodium Bisulphite Solution is a convenient source of sulphur dioxide often used as an alternative to the powder /crystalline Sodium Sulphite / Sodium Metabisulphite. It is used as a reducing agent in a variety of applications, for example:
in effluent treatment particularly that containing chromium
as an antichlor in the textile and other industries
as an oxygen scavenger in boiler water treatment and in oil exploration/extraction
as a chemical substance in the manufacture of some dyestuffs, e.g. indigo and in the manufacture of pharmaceutical intermediates.

Physico-chemical properties

Chemical formula NaHSO_3

Mol Wt. 104.07 g/mol

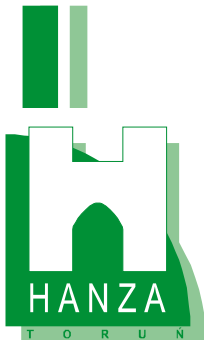
Density in temp.20°C 1.3-1.4 g/cm³

Sodium Bisulphite decomposes with liberation of sulphur dioxide.

Technical Specification

a) NaHSO_3	max.	40	%
b) Sodium sulphite (Na_2SO_3)	max.	1	%
c) Sodium sulphate (Na_2SO_4)	max	1,5	%
d) Iron (Fe)	max.	10	mg/kg
e) Heavy metals (as Pb)	max.	10	mg/kg
f) Arsenic (As)	max.	1,0	mg/kg
g) Lead (Pb)	max.	2,0	mg/kg
h) Selenium (Se)	max	2,0	mg/kg
i) Mercury (Hg)	max.	0,05	mg/kg
j) pH	min.	4	

Analysis made by ZN- „HANZA” Sp. z o.o.-001:2008



HEALTH & SAFETY INFORMATION

Storage

It should be stored in acid resistant steel cisterns or in carbon steel cisterns with rubber lining or in polyethylene containers.

Transportation

Sodium bisulphite is supplied in rail cisterns or tank trucks.

RID classification – Class 8/17 c; ADR classification – Class 8/17 c

Group packing III

Handling Precautions

Wear eye protection and rubber gloves, particularly when handling bulk quantities. Do not store near to, or allow to come into contact with acids or oxidizing agents.

Hazards

Sodium bisulphite solution is mildly corrosive. It is not toxic substance and non-flammable but will decompose in a fire with liberation of sulphur dioxide, a toxic gas.

Toxicity

Decomposition of sodium bisulphite solution gives sulphur dioxide. The maximum limit value for SO_2 is 2 mg/m^3 . The odour sensibility threshold is about 0.8 mg/m^3 .

It is irritation to eyes, nose, skin and respiratory tract. During inhalation causes: mucous membrane irritation, coughing, sultrines. After consumption causes: burning feeling in oesophagus and mouth.

First Aid – in case of poisoning SO_2

Eyes: Wash out with water for at least 15 minutes.

Mouth: Wash out with water and give water or milk to drink.

Skin: Wash off with plenty of water.

Inhalation: Remove the person out of the danger area to fresh air, rest and keep warm until symptoms of distress subside.

Obtain medical assistance, particularly if coughing persists.

Spillage

In case of effluent: retard spillage with sand, soil. Dilute with water, slurry with soda ash or lime.