

SULPHANILIC ACID SOLUTION

PRODUCT CODE 894490

Intended Use

Sulphanilic Acid, 0.8% is analytical reagent used along with α -Naphthylamine solution for determination of nitrate reduction.

Principle And Interpretation

The α -Naphthylamine solution and Sulphanilic acid is used to determine nitrate reduction by members of Enterobacteriaceae. The reduction of nitrates (NO_3) leads to the formation of nitrites (NO_2) and may progress to the liberation of nitrogen gas. The nitrate reductase producing organisms reduce nitrate to nitrite which reacts with sulphanilic acid to form a diazonium salt. This salt reacts with α -naphthylamine to form a red coloured, water soluble azo dye which results in the visualization of pink-red colour. A distinct red colour formation within 1-2 minutes indicates reduction of nitrate to nitrite.

PARAMETER

LIMIT

Description	Clear, colourless liquid.
Solubility	Miscible with water.
Concentration ($\text{NH}_2\text{C}_6\text{H}_4\text{SO}_3\text{H}$)	About 0.8% w/v
pH (as such)	About 1.0

Directions

1. Inoculate growth from an 18-24 hours pure culture into Nitrate Broth.
2. Incubate at 35°C for 12 to 24 hours. Very rarely prolonged incubation upto 5 days may be required.
3. Add 0.5 ml α -naphthylamine along with 0.5 ml sulphanilic acid .

Note(s) : Assay (if applicable) method mentioned.

DANGER

HAZARD STATEMENTS : Flammable liquid and vapour. Harmful in contact with skin. Harmful if inhaled. May be harmful if swallowed. May be corrosive to metals. Causes severe skin burns and eye damage. Causes serious eye damage. Harmful to aquatic life.

PRECAUTIONARY STATEMENTS :

Prevention : Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Keep only in original container. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response : IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.

Disposal : Add in small quantities to large, stirred excess of water, keeping the final concentration less than 2%. Neutralize with 5% sodium hydroxide soln. and run to waste with large quantities of running water.

IMDG Code :--
UN No. :--
IATA :--

Hazard Pictogram(s) :



GHS02

GHS05

Replace date 23-Dec-2023