

Sodium Iodide ^{131}I

- Sodium iodide I-131 solution is a solution which is suitable either for oral or intravenous administration, having radioactive I-131 which is processed in the form of sodium iodide from the products of uranium fission or the neutron bombardment of tellurium until it becomes essentially carrier free and is having only one minute amounts of naturally occurring iodide -127 B.P.
- It is also having sodium thiosulphate or some other suitable reducing agent.
- Sodium iodide I-131 solutions are suitable for either oral or I.V administration.
- The solutions are clear and colorless, but over a period of time both the solution and glass may darken due to the effects of radiation.
- The pH of the both solutions is between 7.5 and 9.0
- For injection, benzyl alcohol is added as a preservative.
- A reducing agent such as sodium thiosulphate is added to the solution to prevent the oxidation of sodium iodide in aqueous solutions.

Sodium iodide I-131: solution should not contain less than 90% but not more than 110% of the labeled amount of Iodine I-131 as iodine which is expressed in microcuries or millicuries at the time exceeds 5% of the total radioactivity.

Caution: while making dosage calculations, corrections have to be made for radioactive decay. The radioactive half-life of I-131 has been 8.08 days