

I-123 Fact Sheet

Iodine-123 Radiochemical Sodium Iodide Solution

Sodium Iodide (I-123)

Half-Life: 13.2 hours

Iodine-123 Radiochemical Sodium Iodide Solution

Iodine-123 is an ideal research tool for Neurology, Oncology and Cardiology.

Researchers prefer using iodine-123 because of the short half-life, clear SPECT images, and because iodine-123 is easy to handle, shield and dispose of.

MDS Nordion has an unparalleled base of technical expertise and production capabilities. State-of-the-art facilities provide a reliable supply of isotopes to customers around the world.

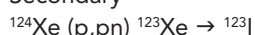
Process Data

Nuclear Reaction

Primary



Secondary



Assay

High resolution gamma spectrometry at 159 keV

Product Specification

Chemical Form

Sodium iodide in 0.1N NaOH

Specific Activity

No carrier added

Activity Concentration*

At customer request

Radiochemical Purity

≥ 95% iodide

Radiopurity*

≥ 99.8% ^{123}I

≤ 0.2% total other nuclides

*Activity and radiopurity specifications are at customer's calibration time.

Packaging

- Kontes vial – crimp cap glass V-vial (1 mL, 3 mL, 5 mL)
- Hypovial – crimp cap glass vial with septum (6 mL, 10 mL, 20 mL, 30 mL) (*Other vial options are available.*)

Availability

Dispensed Monday, Tuesday, Wednesday, Thursday

Product Origin

Vancouver, Canada

World Class Delivery Service

MDS Nordion has a world class distribution system that includes a unique, software-based order management system. Carefully managed transportation logistics ensure products reach their destination on time.

Please note that the radiochemicals listed are not tested for sterility or pyrogenicity. Verification of their suitability for use in humans is the sole responsibility of the purchaser.

Iodine-123 Decay Table Half-Life: 13.2 hours

HOURS:	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75
0	1.0000	0.9870	0.9741	0.9614	0.9488	0.9365	0.9243	0.9122	0.9003	0.8886	0.8770	0.8655
3	0.8542	0.8431	0.8321	0.8213	0.8105	0.8000	0.7895	0.7792	0.7691	0.7591	0.7492	0.7394
6	0.7297	0.7202	0.7108	0.7016	0.6924	0.6834	0.6745	0.6657	0.6570	0.6484	0.6400	0.6316
9	0.6234	0.6152	0.6072	0.5993	0.5915	0.5838	0.5762	0.5686	0.5612	0.5539	0.5467	0.5396
12	0.5325	0.5256	0.5187	0.5120	0.5053	0.4987	0.4922	0.4858	0.4794	0.4732	0.4670	0.4609
15	0.4549	0.4490	0.4431	0.4373	0.4316	0.4260	0.4204	0.4150	0.4096	0.4042	0.3989	0.3937
18	0.3886	0.3835	0.3785	0.3736	0.3687	0.3639	0.3592	0.3545	0.3499	0.3453	0.3408	0.3363
21	0.3320	0.3276	0.3234	0.3191	0.3150	0.3109	0.3068	0.3028	0.2989	0.2950	0.2911	0.2873
24	0.2836	0.2799	0.2762	0.2726	0.2691	0.2656	0.2621	0.2587	0.2553	0.2520	0.2487	0.2454
27	0.2422	0.2391	0.2360	0.2329	0.2299	0.2269	0.2239	0.2210	0.2181	0.2152	0.2124	0.2097
30	0.2069	0.2042	0.2016	0.1989	0.1964	0.1938	0.1913	0.1888	0.1863	0.1839	0.1815	0.1791
33	0.1768	0.1745	0.1722	0.1699	0.1677	0.1655	0.1634	0.1613	0.1592	0.1571	0.1550	0.1530
36	0.1510	0.1490	0.1471	0.1452	0.1433	0.1414	0.1396	0.1378	0.1360	0.1342	0.1324	0.1307
39	0.1290	0.1273	0.1257	0.1240	0.1224	0.1208	0.1192	0.1177	0.1161	0.1146	0.1131	0.1117
42	0.1102	0.1088	0.1073	0.1059	0.1046	0.1032	0.1019	0.1005	0.0992	0.0979	0.0966	0.0954
45	0.0941	0.0929	0.0917	0.0905	0.0893	0.0882	0.0870	0.0859	0.0848	0.0836	0.0826	0.0815
48	0.0804	0.0794	0.0783	0.0773	0.0736	0.0753	0.0743	0.0734	0.0724	0.0715	0.0705	0.0696
51	0.0687	0.0678	0.0669	0.0660	0.0652	0.0643	0.0635	0.0627	0.0618	0.0610	0.0602	0.0595
54	0.0587	0.0579	0.0572	0.0564	0.0557	0.0550	0.0542	0.0535	0.0528	0.0521	0.0515	0.0508
57	0.0501	0.0495	0.0488	0.0482	0.0479	0.0469	0.0463	0.0457	0.0451	0.0445	0.0440	0.0434

The half-life values stated are as of time of publication. MDS Nordion values may vary.

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