TCM-2

^{99}Mo-SODIUM MOLYBDATE SOLUTION

(FOR EXTRACTION OF $Na^{99m}TcO_4$)

^{99}Mo-Sodium molybdate solution is for radiochemical separation of ^{99m}Tc as sodium pertechnetate using solvent extraction generator system with methyl ethyl ketone (MEK) as solvent. The essential reagents and other kit components for this generator system are also supplied.

With each order, one kit is supplied which consists of Empty autoclaved vials, Sterile beakers, Sterile normal saline, Sodium hydroxide, MEK, Alumina and Double distilled water

USES: ^{99m}Tc obtained as $Na^{99m}TcO_4$ from ^{99}Mo-^{99m}Tc generator is most widely used radionuclide in nuclear medicine for the preparation of ^{99m}Tc labelled radiopharmaceuticals for diagnostic applications.

Description	:	^{99}Mo as Sodium molybdate in sodium hydroxide solution
Appearance	:	Clear, faint yellow colored, aqueous preparation.
Radionuclidic purity	:	>99%
Alkalinity	:	Alkaline with reference to phenopthalein indicator.
Molybdenum content	:	150 mg/ml
Specific activity	:	Not less than 10 mCi/g of Mo on the reference date.
Storage	:	Store at room temperature with adequate shielding.
Availability	:	Ex-stock (weekly) despatched on Saturdays.

Radiopharmaceutical laboratory, BRIT, Vashi, Navi Mumbai.

BRIT

Code	Description	Activity
TCM-2	Sodium molybdate [^{99}Mo] solution	50 mCi, 100 mCi, 150 mCi, 200 mCi , 300 mCi as on the reference date

Physical Characteristics of Molybdenum-99

Half life	66.2h (2.748 d)
Decay mode	β^-
E_β (%)	450 keV (14%), 840 keV (2%), 1214 keV (84%)
E_γ (%)	140.5 keV (90.7%), 181 keV (6.07%), 366 keV (1.16%), 406 keV (1.05%), 739 keV (12.14%), 778 keV (4.35%)

Decay Chart of Molybdenum-99

Days	Multiplication Factor	100 mCi on Ref. date	200 mCi on Ref. date	300 mCi on Ref. date
-3	2.12	212	424	636
-2	1.66	166	332	498
-1	1.29	129	258	387
Reference date	**1.00**	**100**	**200**	**300**
1	0.77	77	154	231
2	0.60	60	120	180
3	0.47	47	94	141
4	0.36	36	72	108
5	0.28	28.	56	84
6	0.22	22	44	66
7	0.17	17	34	51
8	0.13	13	26	39
9	0.11	11	22	33

^{99}Mo Dispensing Plant

Automated Packaging & Surface Dose Certification Unit

For placing the orders and further details please contact
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