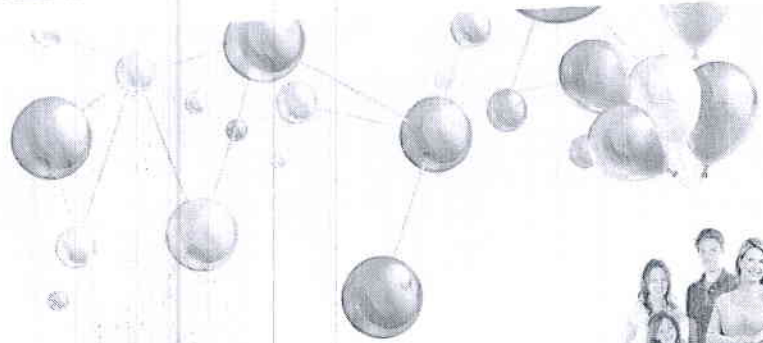


# MOLECULES TO LIFE



## MON. TEK <sup>99</sup>Mo/<sup>99m</sup>Tc Generator

### Content

Mother nuclide : Sodium Molybdate ( $\text{Na}^{99}\text{MoO}_4$ , 10-40 GBq/ Generator (Mo-99 radioactivity at calibration date)

Daughter nuclide : ( $^{99m}\text{Tc}$ ) Sodium Pertechnetate ( $\text{Na}^{99m}\text{TcO}_4$  (derived from  $^{99}\text{Mo}/^{99m}\text{Tc}$  generator system)

### Description

MON. TEK  $^{99}\text{Mo}/^{99m}\text{Tc}$  generator contains fission Molybdenum-99 ( $^{99}\text{Mo}$ ) adsorbed by aluminium oxide ( $\text{Al}_2\text{O}_3$ ) in a glass column. Technetium-99m ( $^{99m}\text{Tc}$ ) formed by the decay of  $^{99}\text{Mo}$ , is a radioactive isotope having a half life of 6.007 hours. After eluting by 0.9% NaCl solution,  $^{99m}\text{Tc}$  sodium pertechnetate solution which is isotonic, colorless, clear, sterile, non-pyrogenic and suitable for IV. Injection is obtained.  $^{99m}\text{Tc}$  sodium pertechnetate solution can be administered to the patients directly or used for labeling the kits

### Calibration Activities

10, 15, 20, 25, 30, 35, 40 GBq  
(Given values are for  $^{99}\text{Mo}$  activity on calibration date)

### Production Days

Wednesday and Saturday

### Calibration Days

Next Thursday (8 a.m.) after production or other days depending on request

### Shelf Life

Generator : 21 days from the date of production  
Eluate : 12 hours after elution time

### Storage

Generator : At room temperature below 25 °C, in lead shield (Do not freeze)  
Eluate : At room temperature below 25 °C, protected from light in lead shield

### Packaging

Generator set:

- 1 unit  $^{99}\text{Mo}/^{99m}\text{Tc}$  radionuclide generator in the special package.
- 5 vials of 10 mL and 5 vials of 5 mL sterile, non-pyrogenic 0.9% NaCl solution in the box.
- 2 x 5 units of sterile, non-pyrogenic evacuated vials in the box.
- 10 units of elution label for vial and
- 10 units of label for lead shield.
- 10 units of swab with alcohol of 70% isopropyl.
- Patient Information Leaflet.

### Disposal of Waste Materials

Any unused product or waste material should be disposed of in accordance with local requirements.

TABLE OF  $^{99m}\text{Tc}$  ACTIVITIES OBTAINED FROM MON-TEK  $\text{Mo}^{99}/\text{Tc}^{99m}$  GENERATORS

| TABLE OF CONVERSION FACTORS |            |        |            |        |            |        |            |        |            |         |            |         |            |         |            |         |            |         |       |         |
|-----------------------------|------------|--------|------------|--------|------------|--------|------------|--------|------------|---------|------------|---------|------------|---------|------------|---------|------------|---------|-------|---------|
| GÜNLER / DAYS               | MON-TEK 10 |        | MON-TEK 15 |        | MON-TEK 20 |        | MON-TEK 25 |        | MON-TEK 30 |         | MON-TEK 35 |         | MON-TEK 40 |         | MON-TEK 45 |         | MON-TEK 50 |         |       |         |
|                             | mCi        | MBq    | mCi        | MBq    | mCi        | MBq    | mCi        | MBq    | mCi        | MBq     | mCi        | MBq     | mCi        | MBq     | mCi        | MBq     | mCi        | MBq     |       |         |
| -6 Cuma/Friday              | 543        | 20,091 | 1,079      | 39,923 | 1,631      | 60,347 | 2,181      | 80,771 | 2,734      | 101,158 | 3,286      | 121,582 | 3,838      | 142,006 | 4,390      | 162,430 | 4,950      | 183,150 | 5,521 | 204,277 |
| -5 Cumartesi/Saturday       | 418        | 15,466 | 831        | 30,747 | 1,256      | 46,472 | 1,680      | 62,160 | 2,105      | 77,885  | 2,530      | 93,610  | 2,955      | 109,335 | 3,380      | 125,060 | 3,817      | 141,026 | 4,251 | 157,287 |
| -4 Pazar/Sunday             | 322        | 11,914 | 640        | 23,680 | 957        | 35,779 | 1,244      | 47,878 | 1,621      | 59,977  | 1,948      | 72,076  | 2,275      | 84,175  | 2,602      | 96,274  | 2,935      | 108,590 | 3,273 | 121,101 |
| -3 Pazartesi/Monday         | 249        | 9,176  | 492        | 18,204 | 734        | 27,528 | 996        | 36,852 | 1,248      | 46,176  | 1,500      | 55,500  | 1,752      | 64,874  | 2,004      | 74,148  | 2,260      | 83,614  | 2,570 | 93,740  |
| -2 Salı/Tuesday             | 191        | 7,067  | 379        | 14,023 | 573        | 21,201 | 767        | 28,379 | 961        | 35,557  | 1,155      | 42,735  | 1,345      | 49,913  | 1,543      | 57,091  | 1,740      | 64,383  | 1,940 | 71,780  |
| -1 Çarşamba/Wednesday       | 147        | 5,439  | 292        | 10,804 | 441        | 16,317 | 590        | 21,830 | 790        | 27,380  | 889        | 32,893  | 1,038      | 38,406  | 1,188      | 43,956  | 1,340      | 49,575  | 1,454 | 55,278  |
| 0 Perşembe/Thursday         | 111        | 4,101  | 225        | 8,345  | 340        | 12,580 | 455        | 16,835 | 570        | 21,090  | 685        | 25,545  | 800        | 29,600  | 915        | 33,855  | 1,037      | 38,175  | 1,150 | 42,550  |
| 1 Cuma/Friday               | 87         | 3,219  | 173        | 6,401  | 261        | 9,657  | 350        | 12,950 | 438        | 16,206  | 527        | 19,499  | 616        | 22,792  | 704        | 26,048  | 794        | 29,393  | 885   | 32,782  |
| 2 Cumartesi/Saturday        | 67         | 2,479  | 133        | 4,921  | 201        | 7,437  | 269        | 9,993  | 337        | 12,469  | 406        | 15,022  | 474        | 17,538  | 542        | 20,054  | 617        | 22,633  | 692   | 25,734  |
| 3 Pazar/Sunday              | 52         | 1,924  | 102        | 3,774  | 155        | 5,735  | 207        | 7,659  | 260        | 9,620   | 317        | 11,544  | 365        | 13,505  | 425        | 15,429  | 471        | 17,427  | 525   | 19,425  |
| 4 Pazartesi/Monday          | 40         | 1,480  | 79         | 2,923  | 119        | 4,403  | 155        | 5,683  | 200        | 7,400   | 240        | 8,880   | 281        | 10,397  | 321        | 11,877  | 363        | 13,419  | 404   | 14,948  |
| 5 Salı/Tuesday              | 31         | 1,147  | 60         | 2,220  | 92         | 3,404  | 123        | 4,551  | 154        | 5,698   | 185        | 6,845   | 216        | 7,992   | 247        | 9,139   | 279        | 10,332  | 311   | 11,507  |
| 6 Çarşamba/Wednesday        | 24         | 888    | 45         | 1,702  | 70         | 2,590  | 94         | 3,478  | 118        | 4,366   | 142        | 5,254   | 166        | 6,142   | 190        | 7,006   | 215        | 7,956   | 240   | 8,880   |
| 7 Perşembe/Thursday         | 18         | 666    | 36         | 1,332  | 54         | 1,998  | 73         | 2,701  | 91         | 3,367   | 109        | 4,033   | 129        | 4,736   | 149        | 5,476   | 169        | 6,126   | 185   | 6,845   |
| 8 Cuma/Friday               | 14         | 518    | 27         | 999    | 42         | 1,554  | 56         | 2,072  | 70         | 2,590   | 84         | 3,100   | 98         | 3,626   | 112        | 4,112   | 127        | 4,717   | 142   | 5,254   |
| 9 Cumartesi/Saturday        | 11         | 407    | 21         | 777    | 32         | 1,184  | 43         | 1,591  | 54         | 1,998   | 65         | 2,405   | 76         | 2,811   | 87         | 3,219   | 98         | 3,626   | 109   | 4,033   |
| 10 Pazar/Sunday             | 8          | 296    | 16         | 592    | 24         | 888    | 33         | 1,221  | 41         | 1,517   | 50         | 1,850   | 59         | 2,166   | 68         | 2,495   | 77         | 2,811   | 87    | 3,219   |
| 11 Pazartesi/Monday         | 6          | 222    | 12         | 444    | 19         | 703    | 25         | 925    | 32         | 1,184   | 39         | 1,406   | 46         | 1,685   | 53         | 1,954   | 60         | 2,200   | 68    | 2,495   |
| 12 Salı/Tuesday             | 5          | 185    | 9          | 333    | 14         | 518    | 19         | 703    | 24         | 888     | 28         | 1,073   | 34         | 1,250   | 40         | 1,480   | 47         | 1,740   | 54    | 1,998   |
| 13 Çarşamba/Wednesday       | 4          | 148    | 7          | 259    | 11         | 407    | 15         | 555    | 19         | 703     | 22         | 814     | 26         | 958     | 31         | 1,147   | 37         | 1,367   | 44    | 1,626   |
| 14 Perşembe/Thursday        | 3          | 111    | 5          | 185    | 8          | 296    | 11         | 407    | 14         | 518     | 17         | 625     | 20         | 736     | 24         | 888     | 28         | 1,073   | 34    | 1,250   |
| 15 Cuma/Friday              | 2          | 74     | 4          | 148    | 6          | 222    | 9          | 333    | 11         | 407     | 13         | 481     | 15         | 555     | 18         | 666     | 21         | 777     | 25    | 925     |

\* Calibration day

Elution activity is the activity obtained by elution on unfiltered generator for 24 hours starting at 08.00 with at least 5 ml 0.9% sodium chloride solution. The obtained activity is between 90 - 110 % of the stated activity

**Eczacıbaşı**

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