

| Radionuklid | Halbwertszeit | Kritisches Organ | Maximal zulässige jährliche Aktivitätsaufnahme infolge Inhalation (Kategorie A) in μCi | MZK für Luft (Kategorie A) in $\mu\text{Ci}/\text{cm}^3$ | Maximal zulässige jährliche Aktivitätsaufnahme infolge Ingestion (Kategorie C) in μCi | MZK für Trinkwasser in $\mu\text{Ci}/\text{cm}^3$ | Radio-toxizitätsgruppe In Klammern Freigrenze in μCi | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Samarium—153 | 47 h | löslich | MDK (UDD) | 1,2-10* | 5-10-7 | 6,2-10 | 2-10-5 | 3 (10) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | unlöslich | MDK (UDD) | 1,0-10* | 4-10-7 | 6,2-10 | | | Europium—152m | 9,3 h | löslich | MDK (UDD) | 1,0-10* | 4-10-7 | 5,0-10 | 2-10-5 | 3 (10) | unlöslich | MDK (UDD) | 8,0-10* | 3-10-7 | 5,0-10 | Europium—152 | 12 a | löslich | MDK (UDD) | — | — | 6,1-10 | 2-10-5 | 2 (1) | Niere | | 3,1-10 | 1-10* | — | unlöslich | | Lunge | | 4,6-10 | 2-10-8 | — | | | | MDK (UDD) | | — | — | 6,1-10 | | | Europium—154 | 16 a | löslich | MDK (UDD) | — | — | 1,8-10 | 6-10-6 | 2 (1) | Niere | | 9,5 | 4-10-9 | — | unlöslich | | Knochen | | 9,5 | 4-10-9 | — | | | | Lunge | | 1,8-10 | 7-10-9 | — | | | | | MDK (UDD) | | — | — | 1,6-10 | | | Europium—155 | 1,81a | löslich | MDK (UDD) | — | — | 1,6-10* | 6-10-5 | 3 (10) | Niere | | 2,3-10* | 9-10-« | — | unlöslich | | Knochen | | 2,5-10* | 1-10-7 | — | | | | Lunge | | 1,8-10* | 7-10-8 | — | | | | | MDK (UDD) | | — | — | 1,6-10* | | | Gadolinium—153 | 242 d | löslich | MDK (UDD) | — | — | 1,7-10* | 6-10-5 | 3 (10) | Knochen | | 5,6-10* | 2-10-7 | — | unlöslich | | Lunge | | 2,3-10* | 9-10-8 | — | | | | MDK (UDD) | | — | — | 1,7-10* | | | Gadolinium—159 | 18 h | löslich | MDK (UDD) | 1,2-10* | 5-10-7 | 6,2-10 | 2-10-5 | 3 (10) | unlöslich | MDK (UDD) | 1,0-10* | 4-10-7 | 6,2-10 | Terbium—160 | 72,1 d | löslich | MDK (UDD) | — | — | 3,5-10 | 1-10-5 | 3 (10) | Knochen | | 2,5-10* | 1-10-7 | — | unlöslich | | Lunge | | 8,0-10 | 3-10-8 | — | | | | MDK (UDD) | | — | — | 3,6-10 | | | Dysprosium—165 | 139,2 min | löslich | MDK (ODD) | 6,4-10* | 3-10-6 | 3,2-10* | 1-10-4 | 3 (10) | unlöslich | MDK (ODD) | 5,2-10* | 2-10-6 | 3,2-10* | Dysprosium—166 | 81,5 h | löslich | MDK (UDD) | 6,1-10* | 2-10-7 | 3,0-10 | 1-10-5 | 3 (10) | unlöslich | MDK (UDD) | 4,9-10* | 2-10-7 | 3,0-10 | Holmium—166 | 26,9 h | löslich | MDK (UDD) | 5,0-10* | 2-10-7 | 2,5-10 | 9-10-6 | 3 (10) | unlöslich |
| Europium—152m | 9,3 h | löslich | MDK (UDD) | 1,0-10* | 4-10-7 | 5,0-10 | 2-10-5 | 3 (10) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | unlöslich | MDK (UDD) | 8,0-10* | 3-10-7 | 5,0-10 | | | Europium—152 | 12 a | löslich | MDK (UDD) | — | — | 6,1-10 | 2-10-5 | 2 (1) | Niere | | 3,1-10 | 1-10* | — | unlöslich | | Lunge | | 4,6-10 | 2-10-8 | — | | | | MDK (UDD) | | — | — | 6,1-10 | | | Europium—154 | 16 a | löslich | MDK (UDD) | — | — | 1,8-10 | 6-10-6 | 2 (1) | Niere | | 9,5 | 4-10-9 | — | unlöslich | | Knochen | | 9,5 | 4-10-9 | — | | | | Lunge | | 1,8-10 | 7-10-9 | — | | | | | MDK (UDD) | | — | — | 1,6-10 | | | Europium—155 | 1,81a | löslich | MDK (UDD) | — | — | 1,6-10* | 6-10-5 | 3 (10) | Niere | | 2,3-10* | 9-10-« | — | unlöslich | | Knochen | | 2,5-10* | 1-10-7 | — | | | | Lunge | | 1,8-10* | 7-10-8 | — | | | | | MDK (UDD) | | — | — | 1,6-10* | | | Gadolinium—153 | 242 d | löslich | MDK (UDD) | — | — | 1,7-10* | 6-10-5 | 3 (10) | Knochen | | 5,6-10* | 2-10-7 | — | unlöslich | | Lunge | | 2,3-10* | 9-10-8 | — | | | | MDK (UDD) | | — | — | 1,7-10* | | | Gadolinium—159 | 18 h | löslich | MDK (UDD) | 1,2-10* | 5-10-7 | 6,2-10 | 2-10-5 | 3 (10) | unlöslich | MDK (UDD) | 1,0-10* | 4-10-7 | 6,2-10 | Terbium—160 | 72,1 d | löslich | MDK (UDD) | — | — | 3,5-10 | 1-10-5 | 3 (10) | Knochen | | 2,5-10* | 1-10-7 | — | unlöslich | | Lunge | | 8,0-10 | 3-10-8 | — | | | | MDK (UDD) | | — | — | 3,6-10 | | | Dysprosium—165 | 139,2 min | löslich | MDK (ODD) | 6,4-10* | 3-10-6 | 3,2-10* | 1-10-4 | 3 (10) | unlöslich | MDK (ODD) | 5,2-10* | 2-10-6 | 3,2-10* | Dysprosium—166 | 81,5 h | löslich | MDK (UDD) | 6,1-10* | 2-10-7 | 3,0-10 | 1-10-5 | 3 (10) | unlöslich | MDK (UDD) | 4,9-10* | 2-10-7 | 3,0-10 | Holmium—166 | 26,9 h | löslich | MDK (UDD) | 5,0-10* | 2-10-7 | 2,5-10 | 9-10-6 | 3 (10) | unlöslich | MDK (UDD) | 4,1-10* | 2-10-7 | 2,5-10 | | | | | | | | | | |
| Europium—152 | 12 a | löslich | MDK (UDD) | — | — | 6,1-10 | 2-10-5 | 2 (1) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Niere | | 3,1-10 | 1-10* | — | | | unlöslich | | Lunge | | 4,6-10 | 2-10-8 | — | | | | MDK (UDD) | | — | — | 6,1-10 | | | Europium—154 | 16 a | löslich | MDK (UDD) | — | — | 1,8-10 | 6-10-6 | 2 (1) | Niere | | 9,5 | 4-10-9 | — | unlöslich | | Knochen | | 9,5 | 4-10-9 | — | | | | Lunge | | 1,8-10 | 7-10-9 | — | | | | | MDK (UDD) | | — | — | 1,6-10 | | | Europium—155 | 1,81a | löslich | MDK (UDD) | — | — | 1,6-10* | 6-10-5 | 3 (10) | Niere | | 2,3-10* | 9-10-« | — | unlöslich | | Knochen | | 2,5-10* | 1-10-7 | — | | | | Lunge | | 1,8-10* | 7-10-8 | — | | | | | MDK (UDD) | | — | — | 1,6-10* | | | Gadolinium—153 | 242 d | löslich | MDK (UDD) | — | — | 1,7-10* | 6-10-5 | 3 (10) | Knochen | | 5,6-10* | 2-10-7 | — | unlöslich | | Lunge | | 2,3-10* | 9-10-8 | — | | | | MDK (UDD) | | — | — | 1,7-10* | | | Gadolinium—159 | 18 h | löslich | MDK (UDD) | 1,2-10* | 5-10-7 | 6,2-10 | 2-10-5 | 3 (10) | unlöslich | MDK (UDD) | 1,0-10* | 4-10-7 | 6,2-10 | Terbium—160 | 72,1 d | löslich | MDK (UDD) | — | — | 3,5-10 | 1-10-5 | 3 (10) | Knochen | | 2,5-10* | 1-10-7 | — | unlöslich | | Lunge | | 8,0-10 | 3-10-8 | — | | | | MDK (UDD) | | — | — | 3,6-10 | | | Dysprosium—165 | 139,2 min | löslich | MDK (ODD) | 6,4-10* | 3-10-6 | 3,2-10* | 1-10-4 | 3 (10) | unlöslich | MDK (ODD) | 5,2-10* | 2-10-6 | 3,2-10* | Dysprosium—166 | 81,5 h | löslich | MDK (UDD) | 6,1-10* | 2-10-7 | 3,0-10 | 1-10-5 | 3 (10) | unlöslich | MDK (UDD) | 4,9-10* | 2-10-7 | 3,0-10 | Holmium—166 | 26,9 h | löslich | MDK (UDD) | 5,0-10* | 2-10-7 | 2,5-10 | 9-10-6 | 3 (10) | unlöslich | MDK (UDD) | 4,1-10* | 2-10-7 | 2,5-10 | | | | | | | | | | | | | | | | | | | | | | | | |
| unlöslich | | Lunge | | 4,6-10 | 2-10-8 | — | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | MDK (UDD) | | — | — | 6,1-10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Europium—154 | 16 a | löslich | MDK (UDD) | — | — | 1,8-10 | 6-10-6 | 2 (1) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Niere | | 9,5 | 4-10-9 | — | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| unlöslich | | Knochen | | 9,5 | 4-10-9 | — | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Lunge | | 1,8-10 | 7-10-9 | — | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | MDK (UDD) | | — | — | 1,6-10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Europium—155 | 1,81a | löslich | MDK (UDD) | — | — | 1,6-10* | 6-10-5 | 3 (10) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Niere | | 2,3-10* | 9-10-« | — | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| unlöslich | | Knochen | | 2,5-10* | 1-10-7 | — | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Lunge | | 1,8-10* | 7-10-8 | — | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | MDK (UDD) | | — | — | 1,6-10* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gadolinium—153 | 242 d | löslich | MDK (UDD) | — | — | 1,7-10* | 6-10-5 | 3 (10) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Knochen | | 5,6-10* | 2-10-7 | — | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| unlöslich | | Lunge | | 2,3-10* | 9-10-8 | — | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | MDK (UDD) | | — | — | 1,7-10* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gadolinium—159 | 18 h | löslich | MDK (UDD) | 1,2-10* | 5-10-7 | 6,2-10 | 2-10-5 | 3 (10) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | unlöslich | MDK (UDD) | 1,0-10* | 4-10-7 | 6,2-10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Terbium—160 | 72,1 d | löslich | MDK (UDD) | — | — | 3,5-10 | 1-10-5 | 3 (10) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Knochen | | 2,5-10* | 1-10-7 | — | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| unlöslich | | Lunge | | 8,0-10 | 3-10-8 | — | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | MDK (UDD) | | — | — | 3,6-10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dysprosium—165 | 139,2 min | löslich | MDK (ODD) | 6,4-10* | 3-10-6 | 3,2-10* | 1-10-4 | 3 (10) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | unlöslich | MDK (ODD) | 5,2-10* | 2-10-6 | 3,2-10* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dysprosium—166 | 81,5 h | löslich | MDK (UDD) | 6,1-10* | 2-10-7 | 3,0-10 | 1-10-5 | 3 (10) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | unlöslich | MDK (UDD) | 4,9-10* | 2-10-7 | 3,0-10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Holmium—166 | 26,9 h | löslich | MDK (UDD) | 5,0-10* | 2-10-7 | 2,5-10 | 9-10-6 | 3 (10) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | unlöslich | MDK (UDD) | 4,1-10* | 2-10-7 | 2,5-10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |