SCHEDULE 4

SPECIFIED QUANTITIES FOR THE TRANSPORT OF RADIONUCLIDES

PART I

Commencement Information
I1 Sch. 4 Pt. I in force at 20.9.2001, see **reg. 1**

Table of radionuclides

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Actinium		
Ac-225	(see note 1)	$6\ 10^{9}$
Ac-227	(see note 1)	$9\ 10^{7}$
Ac-228		$5\ 10^{11}$
Aluminium		
Al-26		$1\ 10^{11}$
Americium		
Am-241		$1\ 10^{9}$
Am-242m	(see note 1)	$1\ 10^{9}$
Am-243	(see note 1)	$1\ 10^{9}$
Antimony		
Sb-122		$4\ 10^{11}$
Sb-124		$6\ 10^{11}$
Sb-125		$1\ 10^{12}$
Sb-126		$4\ 10^{11}$
Argon		
Ar-37		$4\ 10^{13}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Changes to legislation: *There are outstanding changes not yet made by the legislation.gov.uk editorial team to The Radiation (Emergency Preparedness and Public Information) Regulations 2001. Any changes that have already been made by the team appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes*

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Ar-39		$2\ 10^{13}$
Ar-41		$3\ 10^{11}$
Arsenic		
As-72		$3\ 10^{11}$
As-73		$4\ 10^{13}$
As-74		$9\ 10^{11}$
As-76		$3\ 10^{11}$
As-77		$7\ 10^{11}$
Astatine		
At-211	(see note 1)	$5\ 10^{11}$
Barium		
Ba-131	(see note 1)	$2\ 10^{12}$
Ba-133		$3\ 10^{12}$
Ba-133m		$6\ 10^{11}$
Ba-140	(see note 1)	$3\ 10^{11}$
Berkelium		
Bk-247		$8\ 10^{8}$
Bk-249	(see note 1)	$3\ 10^{11}$
Beryllium		
Be-7		$2\ 10^{13}$
Be-10		$6\ 10^{11}$
Bismuth		
Bi-205		$7\ 10^{11}$
Bi-206		$3\ 10^{11}$
Bi-207		$7\ 10^{11}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Bi-210		$6\ 10^{11}$
Bi-210m	(see note 1)	$2\ 10^{10}$
Bi-212	(see note 1)	$6\ 10^{11}$
Bromine		
Br-76		$4\ 10^{11}$
Br-77		$3\ 10^{12}$
Br-82		$4\ 10^{11}$
Cadmium		
Cd-109		$2\ 10^{12}$
Cd-113m		$5\ 10^{11}$
Cd-115	(see note 1)	$4\ 10^{11}$
Cd-115m		$5\ 10^{11}$
Caesium		
Cs-129		$4\ 10^{12}$
Cs-131		$3\ 10^{13}$
Cs-132		$1\ 10^{12}$
Cs-134		$7\ 10^{11}$
Cs-134m		$6\ 10^{11}$
Cs-135		$1\ 10^{12}$
Cs-136		$5\ 10^{11}$
Cs-137	(see note 1)	$6\ 10^{11}$
Calcium		
Ca-41		unlimited
Ca-45		$1\ 10^{12}$
Ca-47	(see note 1)	$3\ 10^{11}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Californium		
Cf-248		$6\ 10^{9}$
Cf-249		$8\ 10^{8}$
Cf-250		$2\ 10^{9}$
Cf-251		$7\ 10^{8}$
Cf-252		$3\ 10^{9}$
Cf-253	(see note 1)	$4\ 10^{10}$
Cf-254		$1\ 10^{9}$
Carbon		
C-11		$6\ 10^{11}$
C-14		$3\ 10^{12}$
Cerium		
Ce-139		$2\ 10^{12}$
Ce-141		$6\ 10^{11}$
Ce-143		$6\ 10^{11}$
Ce-144	(see note 1)	$2\ 10^{11}$
Chlorine		
Cl-36		$6\ 10^{11}$
Cl-38		$2\ 10^{11}$
Chromium		
Cr-51		$3\ 10^{13}$
Cobalt		
Co-55		$5\ 10^{11}$
Co-56		$3\ 10^{11}$
Co-57		$1\ 10^{13}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Co-58		$1\ 10^{12}$
Co-58m		$4\ 10^{13}$
Co-60		$4\ 10^{11}$
Copper		
Cu-64		$1\ 10^{12}$
Cu-67		$7\ 10^{11}$
Curium		
Cm-240		$2\ 10^{10}$
Cm-241		$1\ 10^{12}$
Cm-242		$1\ 10^{10}$
Cm-243		$1\ 10^{9}$
Cm-244		$2\ 10^{9}$
Cm-245		$9\ 10^{8}$
Cm-246		$9\ 10^{8}$
Cm-247	(see note 1)	$1\ 10^{9}$
Cm-248		$3\ 10^{8}$
Dysprosium		
Dy-159		$2\ 10^{13}$
Dy-165		$6\ 10^{11}$
Dy-166	(see note 1)	$3\ 10^{11}$
Erbium		
Er-169		$1\ 10^{12}$
Er-171		$5\ 10^{11}$
Europium		
Eu-147		$2\ 10^{12}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Eu-148		$5\ 10^{11}$
Eu-149		$2\ 10^{13}$
Eu-150	(long lived isotope)	$7\ 10^{11}$
Eu-150	(short lived isotope)	$7\ 10^{11}$
Eu-152		$1\ 10^{12}$
Eu-152m		$8\ 10^{11}$
Eu-154		$6\ 10^{11}$
Eu-155		$3\ 10^{12}$
Eu-156		$7\ 10^{11}$
Fluorine		
F-18		$6\ 10^{11}$
Gadolinium		
Gd-146	(see note 1)	$5\ 10^{11}$
Gd-148		$2\ 10^{9}$
Gd-153		$9\ 10^{12}$
Gd-159		$6\ 10^{11}$
Gallium		
Ga-67		$3\ 10^{12}$
Ga-68		$5\ 10^{11}$
Ga-72		$4\ 10^{11}$
Germanium		
Ge-68	(see note 1)	$5\ 10^{11}$
Ge-71		$4\ 10^{13}$
Ge-77		$3\ 10^{11}$
Gold		

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Au-193		$2\ 10^{12}$
Au-194		$1\ 10^{12}$
Au-195		$6\ 10^{12}$
Au-198		$6\ 10^{11}$
Au-199		$6\ 10^{11}$
Hafnium		
Hf-172	(see note 1)	$6\ 10^{11}$
Hf-175		$3\ 10^{12}$
Hf-181		$5\ 10^{11}$
Hf-182		unlimited
Holmium		
Ho-166		$4\ 10^{11}$
Ho-166m		$5\ 10^{11}$
Hydrogen		
H-3		$4\ 10^{13}$
Indium		
In-111		$3\ 10^{12}$
In-113m		$2\ 10^{12}$
In-114m	(see note 1)	$5\ 10^{11}$
In-115m		$1\ 10^{12}$
Iodine		
I-123		$3\ 10^{12}$
I-124		$1\ 10^{12}$
I-125		$3\ 10^{12}$
I-126		$1\ 10^{12}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
I-129		unlimited
I-131		$7\ 10^{11}$
I-132		$4\ 10^{11}$
I-133		$6\ 10^{11}$
I-134		$3\ 10^{11}$
I-135	(see note 1)	$6\ 10^{11}$
Iridium		
Ir-189	(see note 1)	$1\ 10^{13}$
Ir-190		$7\ 10^{11}$
Ir-192		$6\ 10^{11}$
Ir-194		$3\ 10^{11}$
Iron		
Fe-52	(see note 1)	$3\ 10^{11}$
Fe-55		$4\ 10^{13}$
Fe-59		$9\ 10^{11}$
Fe-60	(see note 1)	$2\ 10^{11}$
Krypton		
Kr-81		$4\ 10^{13}$
Kr-85		$1\ 10^{13}$
Kr-85m		$3\ 10^{12}$
Kr-87		$2\ 10^{11}$
Lanthanum		
La-137		$6\ 10^{12}$
La-140		$4\ 10^{11}$
Lead		

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Pb-201		$1\ 10^{12}$
Pb-202		$2\ 10^{13}$
Pb-203		$3\ 10^{12}$
Pb-205		unlimited
Pb-210	(see note 1)	$5\ 10^{10}$
Pb-212	(see note 1)	$2\ 10^{11}$
Lutetium		
Lu-172		$6\ 10^{11}$
Lu-173		$8\ 10^{12}$
Lu-174		$9\ 10^{12}$
Lu-174m		$1\ 10^{13}$
Lu-177		$7\ 10^{11}$
Magnesium		
Mg-28	(see note 1)	$3\ 10^{11}$
Manganese		
Mn-52		$3\ 10^{11}$
Mn-53		unlimited
Mn-54		$1\ 10^{12}$
Mn-56		$3\ 10^{11}$
Mercury		
Hg-194	(see note 1)	$1\ 10^{12}$
Hg-195m	(see note 1)	$7\ 10^{11}$
Hg-197		$1\ 10^{13}$
Hg-197m		$4\ 10^{11}$
Hg-203		$1\ 10^{12}$

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Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Molybdenum		
Mo-93		$2\ 10^{13}$
Mo-99	(see note 1)	$6\ 10^{11}$
Neodymium		
Nd-147		$6\ 10^{11}$
Nd-149		$5\ 10^{11}$
Neptunium		
Np-235		$4\ 10^{13}$
Np-236	(long lived isotope)	$2\ 10^{10}$
Np-236	(short lived isotope)	$2\ 10^{12}$
Np-237		$2\ 10^{9}$
Np-239		$4\ 10^{11}$
Nickel		
Ni-59		unlimited
Ni-63		$3\ 10^{13}$
Ni-65		$4\ 10^{11}$
Niobium		
Nb-93m		$3\ 10^{13}$
Nb-94		$7\ 10^{11}$
Nb-95		$1\ 10^{12}$
Nb-97		$6\ 10^{11}$
Nitrogen		
N-13		$6\ 10^{11}$
Osmium		
Os-185		$1\ 10^{12}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Os-191		$2\ 10^{12}$
Os-191m		$3\ 10^{13}$
Os-193		$6\ 10^{11}$
Os-194	(see note 1)	$3\ 10^{11}$
Palladium		
Pd-103	(see note 1)	$4\ 10^{13}$
Pd-107		unlimited
Pd-109		$5\ 10^{11}$
Phosphorus		
P-32		$5\ 10^{11}$
P-33		$1\ 10^{12}$
Platinum		
Pt-188	(see note 1)	$8\ 10^{11}$
Pt-191		$3\ 10^{12}$
Pt-193		$4\ 10^{13}$
Pt-193m		$5\ 10^{11}$
Pt-195m		$5\ 10^{11}$
Pt-197		$6\ 10^{11}$
Pt-197m		$6\ 10^{11}$
Plutonium		
Pu-236		$3\ 10^{9}$
Pu-237		$2\ 10^{13}$
Pu-238		$1\ 10^{9}$
Pu-239		$1\ 10^{9}$
Pu-240		$1\ 10^{9}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Pu-241	(see note 1)	$6\ 10^{10}$
Pu-242		$1\ 10^{9}$
Pu-244	(see note 1)	$1\ 10^{9}$
Polonium		
Po-210		$2\ 10^{10}$
Potassium		
K-40		$9\ 10^{11}$
K-42		$2\ 10^{11}$
K-43		$6\ 10^{11}$
Praseodymium		
Pr-142		$4\ 10^{11}$
Pr-143		$6\ 10^{11}$
Promethium		
Pm-143		$3\ 10^{12}$
Pm-144		$7\ 10^{11}$
Pm-145		$1\ 10^{13}$
Pm-147		$2\ 10^{12}$
Pm-148m	(see note 1)	$7\ 10^{11}$
Pm-149		$6\ 10^{11}$
Pm-151		$6\ 10^{11}$
Protactinium		
Pa-230	(see note 1)	$7\ 10^{10}$
Pa-231		$4\ 10^{8}$
Pa-233		$7\ 10^{11}$
Radium		

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Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Ra-223	(see note 1)	$7\ 10^{9}$
Ra-224	(see note 1)	$2\ 10^{10}$
Ra-225	(see note 1)	$4\ 10^{9}$
Ra-226	(see note 1)	$3\ 10^{9}$
Ra-228	(see note 1)	$2\ 10^{10}$
Radon		
Rn-222	(see note 1)	$4\ 10^{9}$
Rhenium		
Re-184		$1\ 10^{12}$
Re-184m		$1\ 10^{12}$
Re-186		$6\ 10^{11}$
Re-187		unlimited
Re-188		$4\ 10^{11}$
Re-189	(see note 1)	$6\ 10^{11}$
Re-natural		unlimited
Rhodium		
Rh-99		$2\ 10^{12}$
Rh-101		$3\ 10^{12}$
Rh-102		$5\ 10^{11}$
Rh-102m		$2\ 10^{12}$
Rh-103m		$4\ 10^{13}$
Rh-105		$8\ 10^{11}$
Rubidium		
Rb-81		$8\ 10^{11}$
Rb-83	(see note 1)	$2\ 10^{12}$

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Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Rb-84		$1\ 10^{12}$
Rb-86		$5\ 10^{11}$
Rb-87		unlimited
Rb-natural		unlimited
Ruthenium		
Ru-97		$5\ 10^{12}$
Ru-103	(see note 1)	$2\ 10^{12}$
Ru-105		$6\ 10^{11}$
Ru-106	(see note 1)	$2\ 10^{11}$
Samarium		
Sm-145		$1\ 10^{13}$
Sm-147		unlimited
Sm-151		$1\ 10^{13}$
Sm-153		$6\ 10^{11}$
Scandium		
Sc-44		$5\ 10^{11}$
Sc-46		$5\ 10^{11}$
Sc-47		$7\ 10^{11}$
Sc-48		$3\ 10^{11}$
Selenium		
Se-75		$3\ 10^{12}$
Se-79		$2\ 10^{12}$
Silicon		
Si-31		$6\ 10^{11}$
Si-32		$5\ 10^{11}$

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Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Silver		
Ag-105		$2\ 10^{12}$
Ag-108m	(see note 1)	$7\ 10^{11}$
Ag-110m	(see note 1)	$4\ 10^{11}$
Ag-111		$6\ 10^{11}$
Sodium		
Na-22		$5\ 10^{11}$
Na-24		$2\ 10^{11}$
Strontium		
Sr-82	(see note 1)	$2\ 10^{11}$
Sr-85		$2\ 10^{12}$
Sr-85m		$5\ 10^{12}$
Sr-87m		$3\ 10^{12}$
Sr-89		$6\ 10^{11}$
Sr-90	(see note 1)	$3\ 10^{11}$
Sr-91	(see note 1)	$3\ 10^{11}$
Sr-92	(see note 1)	$3\ 10^{11}$
Sulphur		
S-35		$3\ 10^{12}$
Tantalum		
Ta-178	(long lived isotope)	$8\ 10^{11}$
Ta-179		$3\ 10^{13}$
Ta-182		$5\ 10^{11}$
Technetium		
Tc-95m	(see note 1)	$2\ 10^{12}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Tc-96		$4\ 10^{11}$
Tc-96m	(see note 1)	$4\ 10^{11}$
Tc-97		unlimited
Tc-97m		$1\ 10^{12}$
Tc-98		$7\ 10^{11}$
Tc-99		$9\ 10^{11}$
Tc-99m		$4\ 10^{12}$
Tellurium		
Te-121		$2\ 10^{12}$
Te-121m		$3\ 10^{12}$
Te-123m		$1\ 10^{12}$
Te-125m		$9\ 10^{11}$
Te-127		$7\ 10^{11}$
Te-127m	(see note 1)	$5\ 10^{11}$
Te-129		$6\ 10^{11}$
Te-129m	(see note 1)	$4\ 10^{11}$
Te-131m	(see note 1)	$5\ 10^{11}$
Te-132	(see note 1)	$4\ 10^{11}$
Terbium		
Tb-157		$4\ 10^{13}$
Tb-158		$1\ 10^{12}$
Tb-160		$6\ 10^{11}$
Thallium		
Tl-200		$9\ 10^{11}$
Tl-201		$4\ 10^{12}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Tl-202		$2\ 10^{12}$
Tl-204		$7\ 10^{11}$
Thorium		
Th-227		5 109
Th-228	(see note 1)	$1\ 10^{9}$
Th-229		$5\ 10^{8}$
Th-230		$1\ 10^{9}$
Th-231		$2\ 10^{10}$
Th-232		unlimited
Th-234	(see note 1)	$3\ 10^{11}$
Th-natural		unlimited
Thulium		
Tm-167		$8\ 10^{11}$
Tm-170		$6\ 10^{11}$
Tm-171		$4\ 10^{13}$
Tin		
Sn-113	(see note 1)	$2\ 10^{12}$
Sn-117m		$4\ 10^{11}$
Sn-119m		$3\ 10^{13}$
Sn-121m	(see note 1)	$9\ 10^{11}$
Sn-123		$6\ 10^{11}$
Sn-125		$4\ 10^{11}$
Sn-126	(see note 1)	$4\ 10^{11}$
Titanium		
Ti-44	(see note 1)	$4\ 10^{11}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Tungsten		
W-178	(see note 1)	$5\ 10^{12}$
W-181		$3\ 10^{13}$
W-185		$8\ 10^{11}$
W-187		$6\ 10^{11}$
W-188	(see note 1)	$3\ 10^{11}$
Uranium		
U-230	(fast lung absorption, see notes 1 and 2)	$1\ 10^{11}$
U-230	(medium lung absorption see notes 1 and 3)	$4\ 10^{9}$
U-230	(slow lung absorption, see notes 1 and 4)	$3\ 10^{9}$
U-232	(fast lung absorption, see note 2)	$1\ 10^{10}$
U-232	(medium lung absorption, see note 3)	$7\ 10^{9}$
U-232	(slow lung absorption, see note 4)	$1\ 10^{9}$
U-233	(fast lung absorption, see note 2)	$9\ 10^{10}$
U-233	(medium lung absorption, see note 3)	$2\ 10^{10}$
U-233	(slow lung aborption, see note 4)	$6\ 10^{9}$
U-234	(fast lung absorption, see note 2)	$9\ 10^{10}$
U-234		$2\ 10^{10}$
U-234	(medium lung absorption, see note 3)	$6\ 10^{9}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
U-235	(slow lung absorption, see note 4)	unlimited
U-236	(all lung absorption types, see notes 1, 2, 3 and 4)	unlimited
U-236	(fast lung absorption, see note 2)	$2\ 10^{10}$
U-236	(medium lung absorption, see note 3)	$6\ 10^{9}$
U-238	(slow lung absorption, see note 4)	unlimited
U-natural	(all lung absorption types, see notes 2, 3 and 4)	unlimited
U (enriched to 20% or less)		unlimited
U-depleted	(see note 5)	unlimited
Vanadium		
V-48		$4\ 10^{11}$
V-49		$4\ 10^{13}$
Xenon		
Xe-122	(see note 1)	$4\ 10^{11}$
Xe-123		$7\ 10^{11}$
Xe-127		$2\ 10^{12}$
Xe-131m		$4\ 10^{13}$
Xe-133		$1\ 10^{13}$
Xe-135		$2\ 10^{12}$
Ytterbium		
Yb-169		$1\ 10^{12}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Yb-175		$9\ 10^{11}$
Yttrium		
Y-87	(see note 1)	$1\ 10^{12}$
Y-88		$4\ 10^{11}$
Y-90		$3\ 10^{11}$
Y-91		$6\ 10^{11}$
Y-91m		$2\ 10^{12}$
Y-92		$2\ 10^{11}$
Y-93		$3\ 10^{11}$
Zinc		
Zn-65		$2\ 10^{12}$
Zn-69		$6\ 10^{11}$
Zn-69m	(see note 1)	$6\ 10^{11}$
Zirconium		
Zr-88		$3\ 10^{12}$
Zr-93		unlimited
Zr-95	(see note 1)	$8\ 10^{11}$
Zr-97	(see note 1)	$4\ 10^{11}$
Other radionuclides not listed above where only beta or gamma emitting nuclides are known to be present	(see note 6)	$2\ 10^{10}$
Other radionuclides not listed above where alpha emitting nuclides are known to be present or no relevant data are available	(see note 6)	$9\ 10^{7}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O_3, UF_4, UCl_4 and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Changes to legislation:
There are outstanding changes not yet made by the legislation.gov.uk editorial team to The Radiation (Emergency Preparedness and Public Information) Regulations 2001. Any changes that have already been made by the team appear in the content and are referenced with annotations.
View outstanding changes

Changes and effects yet to be applied to :

- Sch. 4 Pt. 1 Note 3 word substituted by S.I. 2002/2099 Sch. 4 para. 10
- Regulations revoked by S.I. 2019/703 reg. 27
- defn(s) appl by S.I. 2005/2042 reg 12(e)

Changes and effects yet to be applied to the whole Instrument associated Parts and Chapters:
Whole provisions yet to be inserted into this Instrument (including any effects on those provisions):

- reg. 2(9A) added by S.I. 2005/2560 reg. 2(3)
- reg. 3(6) added by S.I. 2004/568 Sch. 13 para. 11(3)(e)
- reg. 3(6) substituted by S.I. 2007/1573 Sch. 8
- reg. 7(6)(aa)(ab) substituted for word by S.I. 2013/235 Sch. 2 para. 47(3)
- reg. 7(6)(ab) words inserted by S.I. 2018/378 Sch. para. 20(d)
- reg. 8(7)(aa) substituted for word by S.I. 2013/235 Sch. 2 para. 47(4)
- reg. 8(7)(aa) words inserted by S.I. 2018/378 Sch. para. 20(d)
- reg. 9(12)(aa)(ab) substituted for word by S.I. 2013/235 Sch. 2 para. 47(5)
- reg. 9(12)(ab) words inserted by S.I. 2018/378 Sch. para. 20(d)
- reg. 18A inserted by S.I. 2006/557 Sch. para. 10
- reg. 18A heading words substituted by S.I. 2015/1682 Sch. para. 10(f)
- reg. 18A words substituted by S.I. 2015/1682 Sch. para. 10(f)(i)
- reg. 18A(2)(aa) inserted by S.I. 2014/469 Sch. 3 para. 105(2)
- reg. 18B inserted by S.I. 2014/469 Sch. 3 para. 105(3)
- reg. 18B(2)(b) words substituted by S.I. 2015/1682 Sch. para. 10(f)(ii)