

Packaging in the case of radioactive material. The assembly of components necessary to enclose the radioactive contents completely. It may, in particular, consist of one or more receptacles, absorbent materials, spacing structures, radiation shielding and service equipment for filling, emptying, venting and pressure relief; devices for cooling, absorbing mechanical shocks, handling and tie-down, thermal insulation; and service devices integral to the package. The packaging may be a box, drum or similar receptacle, or may also be a freight container.

Note.— For packagings for other dangerous goods, see definitions under 1;3.1.1.

Special form radioactive material. Either:

- a) an indispersible solid radioactive material; or
- b) a sealed capsule containing radioactive material.

Specific activity of a radionuclide. The activity per unit mass of that nuclide. The specific activity of a material must mean the activity per unit mass of the material in which the radionuclides are essentially uniformly distributed.

+ *Note.— The terms “activity concentration” and “specific activity” are synonymous for the purpose of these Instructions.*

Surface contaminated object (SCO). A solid object which is not itself radioactive but which has radioactive material distributed on its surface.

Transport index (TI) assigned to a package, overpack or freight container, or to unpackaged LSA-I, SCO-I or SCO-III. A number which is used to provide control over radiation exposure.

Note.— Unpackaged LSA-I, SCO-I or SCO-III material are not permitted for transport by air.

Unirradiated thorium. Thorium containing not more than 10^{-7} g of uranium-233 per gram of thorium-232.

Unirradiated uranium. Uranium containing not more than 2×10^3 Bq of plutonium per gram of uranium-235, not more than 9×10^6 Bq of fission products per gram of uranium-235 and not more than 5×10^{-3} g of uranium-236 per gram of uranium-235.

Uranium – natural, depleted, enriched:

Natural uranium. Uranium (which may be chemically separated) containing the naturally occurring distribution of uranium isotopes (approximately 99.28 per cent uranium-238, and 0.72 per cent uranium-235 by mass).

Depleted uranium. Uranium containing a lesser mass percentage of uranium-235 than in natural uranium.

Enriched uranium. Uranium containing a greater mass percentage of uranium-235 than 0.72 per cent. In all cases, a very small mass percentage of uranium-234 is present.

7.2 CLASSIFICATION

7.2.1 General provisions

7.2.1.1 Radioactive material must be assigned to one of the UN numbers specified in Table 2-11 in accordance with 7.2.4 to 7.2.5, taking into account the material characteristics determined in 7.2.3.

Table 2-11. Assignment of UN numbers

UN number	Proper shipping name and description ^a
<i>Excepted packages (1;6.1.5)</i>	
UN 2908	Radioactive material, excepted package – empty packaging
UN 2909	Radioactive material, excepted package – articles manufactured from natural uranium or depleted uranium or natural thorium
UN 2910	Radioactive material, excepted package – limited quantity of material
UN 2911	Radioactive material, excepted package – instruments or articles
UN 3507	Uranium hexafluoride, radioactive material, excepted package, less than 0.1 kg per package, non-fissile or fissile-excepted^{b,c}
<i>Low specific activity radioactive material (7.2.3.1)</i>	

<i>UN number</i>	<i>Proper shipping name and description^a</i>
UN 2912	Radioactive material, low specific activity (LSA-I) , non-fissile or fissile excepted ^b
UN 3321	Radioactive material, low specific activity (LSA-II) , non-fissile or fissile excepted ^b
UN 3322	Radioactive material, low specific activity (LSA-III) , non-fissile or fissile excepted ^b
UN 3324	Radioactive material, low specific activity (LSA-II) fissile
UN 3325	Radioactive material, low specific activity (LSA-III) fissile
<i>Surface contaminated objects (7.2.3.2)</i>	
UN 2913	Radioactive material, surface contaminated objects (SCO-I, SCO-II or SCO-III) , non-fissile or fissile excepted ^b
UN 3326	Radioactive material, surface contaminated objects (SCO-I or SCO-II), fissile
<i>Type A packages (7.2.4.4)</i>	
UN 2915	Radioactive material, Type A package , non-special form, non-fissile or fissile excepted ^b
UN 3327	Radioactive material, Type A package, fissile , non-special form
UN 3332	Radioactive material, Type A package, special form , non-fissile or fissile excepted ^b
UN 3333	Radioactive material, Type A package, special form, fissile
<i>Type B(U) package (7.2.4.6)</i>	
UN 2916	Radioactive material, Type B(U) package , non-fissile or fissile excepted ^b
UN 3328	Radioactive material, Type B(U) package, fissile
<i>Type B(M) package (7.2.4.6)</i>	
UN 2917	Radioactive material, Type B(M) package , non-fissile or fissile excepted ^b
UN 3329	Radioactive material, Type B(M) package, fissile
<i>Type C package (7.2.4.6)</i>	
UN 3323	Radioactive material, Type C package , non-fissile or fissile excepted ^b
UN 3330	Radioactive material, Type C package, fissile
<i>Special arrangement (7.2.5)</i>	
UN 2919	Radioactive material, transported under special arrangement , non-fissile or fissile excepted ^b
UN 3331	Radioactive material, transported under special arrangement, fissile
<i>Uranium hexafluoride (7.2.4.5)</i>	
UN 2977	Radioactive material, uranium hexafluoride, fissile
UN 2978	Radioactive material, uranium hexafluoride , non-fissile or fissile excepted ^b
UN 3507	Uranium hexafluoride, radioactive material, excepted package , less than 0.1 kg per package, non-fissile or fissile-excepted ^{b,c}
<p>a. The proper shipping name is found in the column "proper shipping name and description" and is restricted to that part shown in bold letters. In the cases of UN Nos. 2909, 2911, 2913 and 3326, where alternative proper shipping names are separated by the word "or", only the relevant proper shipping name must be used.</p> <p>b. The term "fissile-excepted" refers only to material excepted under 7.2.3.5.</p> <p>c. For UN No. 3507, see also Special Provision A194.</p>	