MODEL PO-11 TYPE B (U) PACKAGING

USE

Model PO-11 Type B (U) packaging is designed for the transport and storage of special form radioactive materials as well as radioactive materials other than special form, including liquids. The material can be accommodated in the packaging either on its own or enclosed in a shielding container which alone would not "withstand conditions arising during a traffic accident". The shielding container must be leaktight. The effective dose rate on the shielding container surface must be ≤3 mSv/hr. If intended for the transport of liquids, the container must contain a suitable material capable of absorbing as much as the double volume of the liquid being transported. A package comprises the PO-11 packaging accommodating the shielding container with the radioactive substance inside. The shielding capacity of the packaging alone (without the shielding container) expressed through the effective dose rate on the surface is approximately 1 mSv/hr.

The PO-11 Type B(U) packaging can accommodate a shielding container whose weight, radioactive material included, is

≤25 kg.

Radioactivity of the material may reach levels equivalent to

≤13 GBq ^{60}Co

and its heat output must be

≤10 W

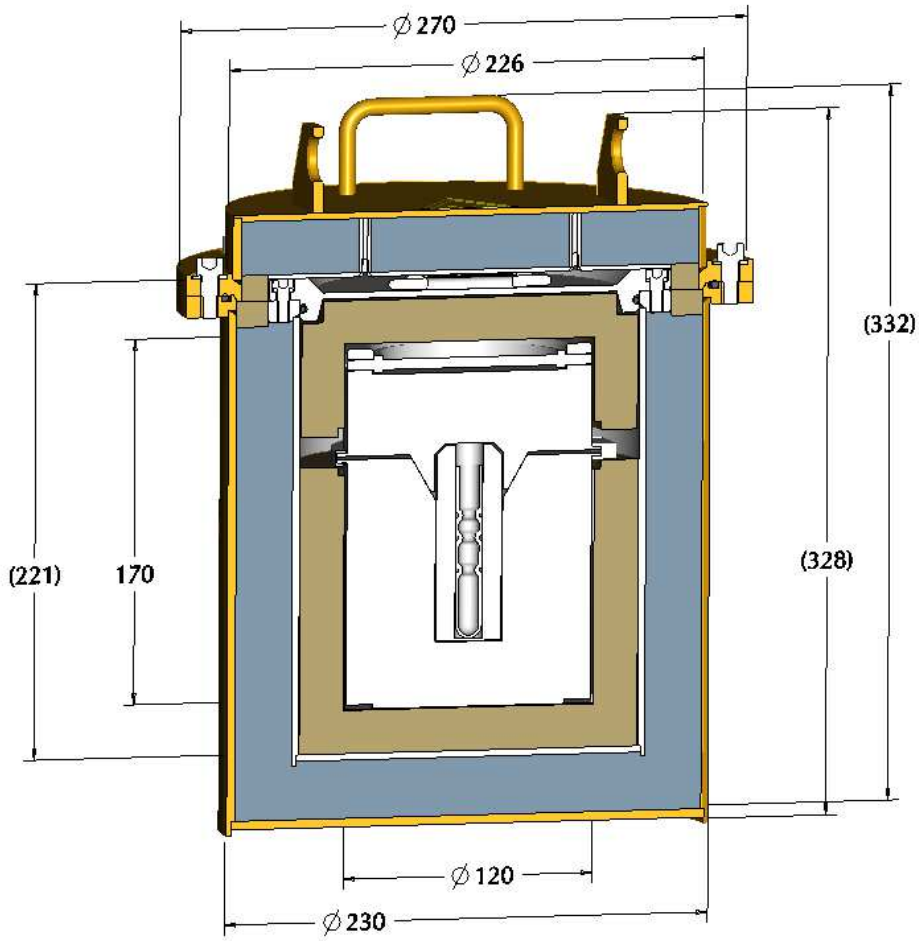
Moreover, the dose equivalent rate must not exceed **2 mSv/hr** on the package's outer surface or **0.1 mSv/hr** at a distance of 1 m from the outer surface.
The shielding container must meet the design requirements of the IAEA Regulations for the Safe Transport of Radioactive Materials (TS-R-1). Lead, tungsten pseudoalloy or depleted uranium, all encased in a steel jacket, can serve as the shielding material. The body and plug must be firmly connected during the transport. The container's shielding capacity and shielding homogeneity must have been verified. The container must meet the requirements for Type A transport as a minimum.

TECHNICAL DATA

Packaging:	Type B(U) for special forms of radioactive substances with low dispersal potential
Permissible radioactivity to be transported:	Equivalent to ≤13GBq ^{60}Co
Permissible radioactive material heat output:	≤10 W
Shielding material and thickness:	Steel 6 mm
External size:	Diameter 270 mm x 332 mm
Internal size:	Diameter 120 mm x 170 mm
Weight:	≤25kg
Shielding container:	
Jacket material:	Steel
Shielding material and thickness:	Lead, tungsten or depleted uranium approx. up to 45 mm steel approx.. up to 5 mm
External size:	Up to diameter 120 mm x 170 mm

PO-11 PACKAGING-CROSS SECTION

Accommodating a shielding container ≤50kg weight



PO-11 PACKAGING

Weight of the empty packaging (no shielding container inside)≤25kg