

Package Design N° 2999A
Package Name: SAFESHIELD



Type

Designed as a B(U) Package to the IAEA Regulations for the Safe Transport of Radioactive Material (TS-R-1).

Certification

The packaging has been certified by the US DOE for DOE use and is currently being certified through the US NRC for shipments in the USA and internationally.

Description

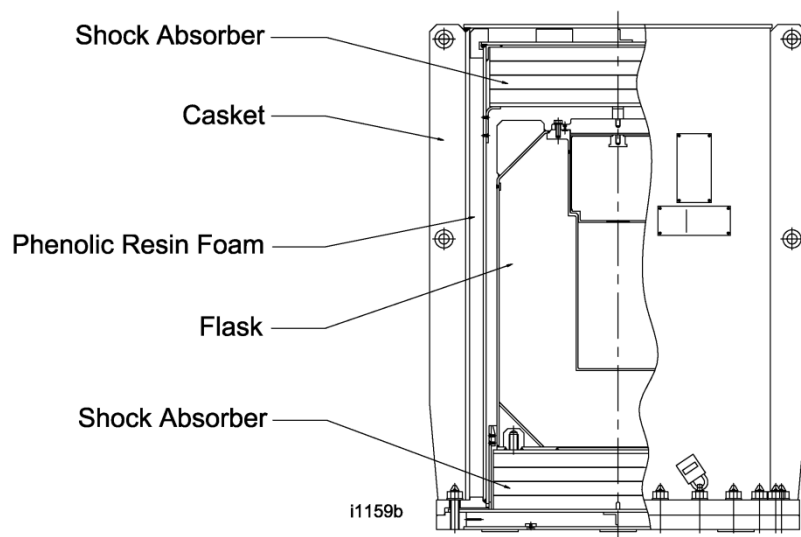
The outer container, Casket Design N° 2999, is a 'double-shell' welded cylindrical casket manufactured in low carbon steel with a circular bolted closure at the base. The space between the 'shells' is filled with phenolic resin foam as a thermal insulation.

The inner container, Flask Design N° 2993, is a robust and compact shielded flask. The flask is a welded stainless steel construction incorporating lead shielding. Access to the cavity is gained by removing a bolted flange and lead filled plug.

Containment

The closure of the inner container Design N° 2993 is in the form of a separate flange with double O-ring seals. The interspace between the O-ring seals facilitates leakage testing to ensure that the seals achieve the prescribed levels of leak tightness. As the flange is separate from the shielding plug, the final closure and subsequent leakage testing can be carried out in a low radiation exposure area.

Section through Package Design N° 2999A



Approved Contents

| | | | |
|----------------------|-------------------|----------|-----------|
| Maximum activity of: | ⁶⁰ Co | 555 TBq | (15 kCi) |
| | ¹³⁷ Cs | 3774 TBq | (102 kCi) |
| | ¹⁹² Ir | 3000 TBq | (81 kCi) |

Maximum heat emission is not to exceed 234 watts.

Shielding thickness 213 mm (8.4") lead.

Approval for other contents in solid form could be approved if required, subject to a safety review.

Modes of Transport

Road, rail, sea, air and inland waterway.

Physical Data

| Parameter | Drum Casket 2999 | Flask 2993 | Plug 262 |
|--|------------------|----------------------|----------|
| External Diameter | 1039 mm | 669 mm | 262 mm |
| External Height | 1396 mm | 918 mm | 241 mm |
| Internal diameter | 727 mm | 220 mm | - |
| Internal Height | 945 mm | 402 mm | - |
| Weight | 1050 kg | 2840 kg incl plug | 140 kg |
| Maximum weight of contents | | | 100 kg |
| Maximum weight of Package Design N° 2999A including contents | | | 3990 kg |

Further Information

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