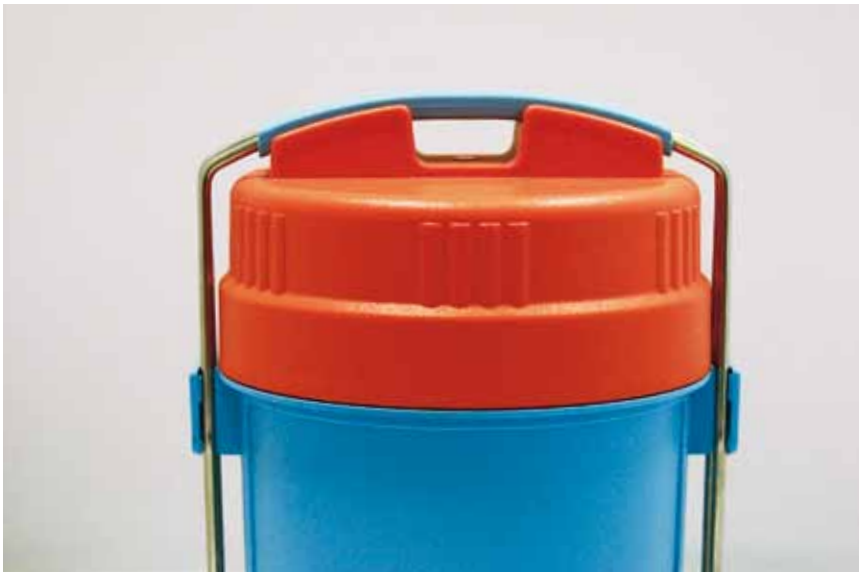
Fact Sheet: Shielded transport tungsten container

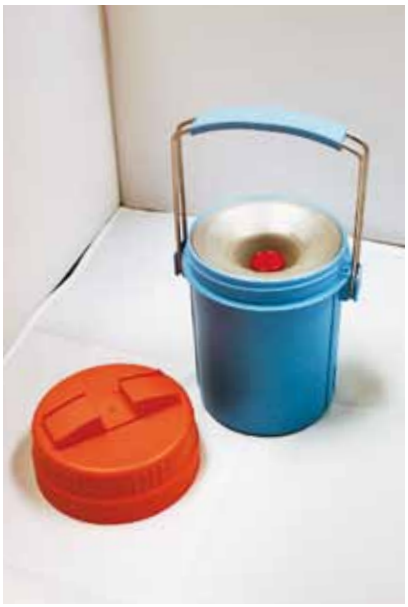
Shielded container

Our new tungsten container improves the overall experience of logistics. It is much easier to handle than other containers. We developed an all new ergonomic design together with renowned Dutch designers*. The new container was awarded the "Good Industrial Design Award" in the Netherlands 2010.

The container has been TÜV-certified for safe transportation of radioactive materials in vials or small containers by road, air, sea and inland waterways.

*Mascal Design and Albert van Dorssen industrial & strategic design





Description

The shielded container is made of tungsten* and can be used in combination with the outer case for safe transport by road or air of vials containing radioactive substances.

The cylindrical body and top are made of tungsten of 30 mm thickness in all directions. The interior of the container is treated with a layer of Niflon (a composite of nickel PTFE) and is cone shaped for easy loading of the vials.

The outer shell is made of acrylonitrile butadiene styrene (ABS), an impact proof polymer shell. The container is equipped with a handle to enable easy handling.

*A version with lead is also available

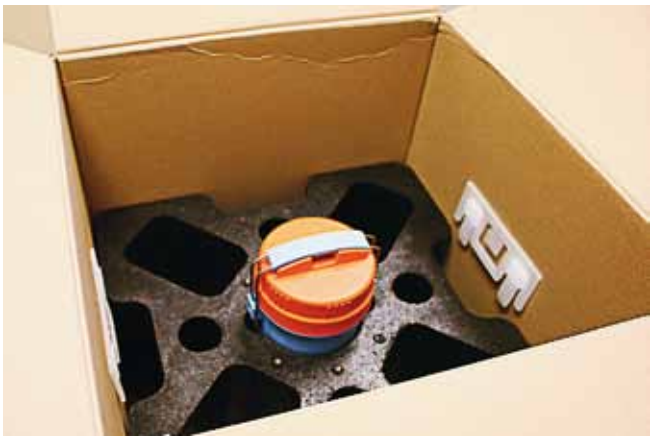
The top is put on with a single rotation and the container is locked by pushing the handle down (See for an animation: http://2cyc.eu/y). An O-ring seal ensures a perfect tightness. The container is compatible with Von Gahlen (www.vongahlen.nl/) hot cells, minimizing handling and greatly reducing radiation exposure for the operator.

The new container together with the outer case complies with all the requirements for safe transport of radioactive materials in vials or small containers by road, air, sea and inland waterways (Type A packaging). Container and outer case together have been certified by TÜV Rheinland Nederland.

Specifications, container

Shielding material:	30 mm tungsten in all directions
Outer dimensions:	110 mm diameter
	119 mm over the grip
	178.5 mm height
Internal dimensions*:	34 mm diameter
	65 mm height
	Weight: 13.6 kg

*On request, we can customize the interior cavity to the dimensions of your vial by fitting an insert.



Specifications, outer case (optional)

The outer case is a Type A cardboard box.

The inside shock absorber is made of EPP and designed to comply with the 9 m drop test without damaging the shielded container.

Dimensions box: 400 x 400 x 400 mm
Total weight (box + tungsten container): 16.4 kg

Tungsten container radiation safety and transport specifications

Maximum shipping activity	Transport category	External radiation level
F-18		
70 GBq (1.9 Ci)	II-YELLOW	<0.5 mSv/h
300 GBq (8.1 Ci)	III-YELLOW	<2 mSv/h
1600 GBq (43 Ci)	III-YELLOWb	<10 mSv/h
Zr-89		
2.5 GBq (67 mCi)	II-YELLOW	<0.5 mSv/h
10 GBq (270 mCi)	III-YELLOW	<2 mSv/h
50 GBq (1.4 Ci)	III-YELLOWb	<10 mSv/h
I-124		
2.5 GBq (67 mCi)	II-YELLOW	<0.5 mSv/h
10 GBq (270 mCi)	III-YELLOW	<2 mSv/h
50 GBq (1.4 Ci)	III-YELLOWb	<10 mSv/h

More information

See for more information: http:2cyc.eu/1j

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