



Delivering life-saving cancer treatments

How the Softbox VIP passed rigorous Type A radioactive testing with A+ results

The Challenge: Finding a partner for critical cancer treatment transport

When a US-based radiopharmaceutical company needed a shipping solution for their radioactive cancer treatment, they faced a complex challenge requiring more than just another packaging provider. Radiopharmaceuticals demand exceptional protection during transport – these life-saving treatments must maintain strict temperature control while meeting stringent Type A radioactive material regulations.

The company's Director of Clinical Supply Chain recalls the difficulty, stating that "CSafe was one of the few companies willing to discuss a radiopharmaceutical shipper design with us." The challenge wasn't just finding a vendor – it was finding a partner willing to explore uncharted territory. While CSafe hadn't worked with radiopharmaceuticals before, their consultative approach and problem-solving mindset stood out. Most packaging companies lacked relevant experience and weren't open to taking on the complexity, leaving the customer with few viable options and the risk of relying on temporary, inefficient solutions that could delay critical therapies.



A consultative engineering approach

CSafe's team took a consultative approach that proved invaluable throughout the project. The process began with in-depth discussions to understand the radioactive pharmaceutical company's product requirements – a smaller solution that could maintain content integrity. This collaboration led to custom-designed components within the Softbox VIP parcel box, including specialized foam inserts (pig holders) to secure the lead containers holding the radioactive payload.

Beyond engineering design, CSAFE coordinated comprehensive third-party testing, managing the complex logistics of validating the customized Softbox VIP against Department of Transportation Type A radioactive regulations.

"Not only did your team help, they were also willing to meet with us on a regular basis and have an engineer available to answer questions," the Director of Clinical Supply Chain noted.

The team's responsiveness and honest communication about timelines, combined with reliable product availability and quick coordination – including Canadian site support – created a strong partnership.

Testing beyond normal transport limits

To validate this custom-engineered solution, the Softbox VIP underwent exhaustive tests that challenged every aspect of its design.

Vibration and Shock Resistance: The packaging endured repetitive shock vibration testing and frequency sweep vibration tests, proving it could withstand constant movement without compromising radioactive content integrity.

Extreme Temperature Performance: Thermal shock testing pushed the packaging through temperature extremes from -40°C to +70°C, ensuring the vacuum insulated panels (VIP) and phase change materials (PCM) preserved temperature stability.

Physical Durability: The Softbox VIP successfully passed a 9-meter (30-foot) drop test and withstood penetration testing from a 6-kilogram steel rod dropped from 1.7 meters, simulating worst-case handling scenarios.

Pressure and Environmental Resistance: Additional evaluation included pressure differential tests and water spray tests, ensuring the packaging maintained protective qualities under varying atmospheric conditions.

Throughout every test, the Softbox VIP demonstrated zero loss of radioactive contents and protected the integrity of the lead-lined pig containers – critical for Type A radioactive materials.



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Multi-layer technology for critical applications

When transporting radioactive material, it is crucial that the shipping solution be highly robust in both performance and durability. In the face of temperature fluctuations, the Softbox VIP's vacuum insulated panels and phase change materials maintain precise control. To prevent any type of leakage, the custom foam insert stabilized and safeguarded each lead pig container. To protect against physical damage from drops or impacts, multi-layer foam cushioning and a sturdy corrugated outer shipper proved impenetrable during rigorous 9-meter drop testing.

Results that enable global distribution

The comprehensive testing validated the Softbox VIP for Type A radioactive materials transport at both 2-8°C and 20-25°C temperature ranges – crucial for this radiopharmaceutical company's global distribution strategy.

"We now have two qualified shippers that meet TYPE A requirements at both 2-8°C and 20-25°C which allows us global distribution without deviations," the Director of Clinical Supply Chain explained. This regulatory approval eliminates costly remedial processes that could impact patient access.

The solution now enables our customer to reliably serve their established markets in the US, Canada, and Europe, while opening doors for expansion into Australia. The company is already preparing to deploy the 2-8°C qualified shipper in an upcoming clinical study, demonstrating confidence in real-world performance.

To learn more about how you can benefit from CSafe's service offering, get in touch.

Your nearest sales representative is ready to help you maximize the impact of your life-saving therapeutics.

Contact us at: sales@csafeglobal.com

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