



VON GAHLEN
FOR SURE



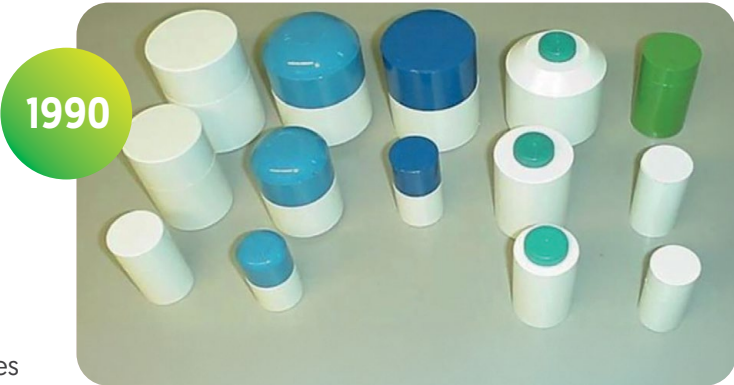
Your partner in Type A Radiopharmaceutical Packaging

Safe and reliable transport solutions
for radiopharmaceuticals

How it started

Von Gahlen created a design at the request of one customer.

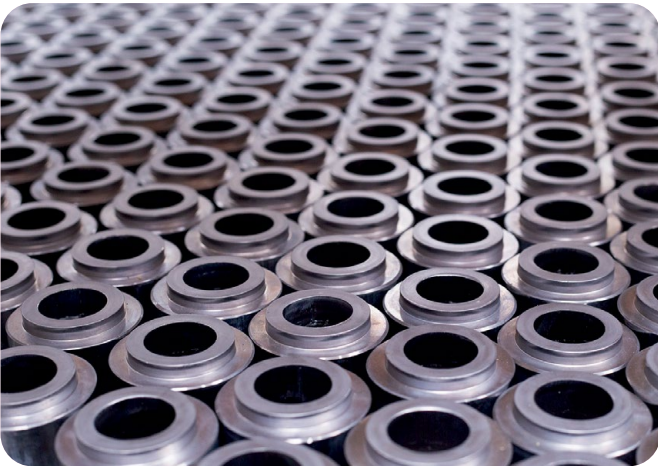
Von Gahlen started producing radiopharmaceutical packaging in 1990 to supply the nuclear medicine industry, in addition to hot cells, with transport possibilities and packaging materials.



Where are we now

Von Gahlen Radiopharmaceutical Packaging today delivers at any scale.

- ⦿ A leading authority in the development of Type A Radiopharmaceutical solutions
- ⦿ Unlimited quantities, produced to your requirements
- ⦿ Anticipating international market developments
- ⦿ Ready for customer needs, also smaller volumes.
- ⦿ Proven Type A certified packaging solutions

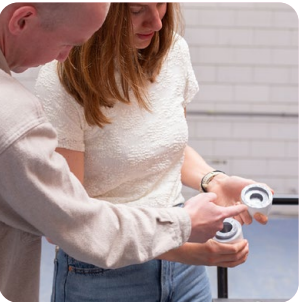


Global Industry Leader in Type A Radiopharmaceutical Packaging

Von Gahlen Radiopharmaceutical Packaging brings all expertise and manufacturing processes together under one roof. This enables our specialists to support every customer with the right expertise and solution, from development and manufacturing through to delivery, ensuring the packaging reaches the patient wherever they are.



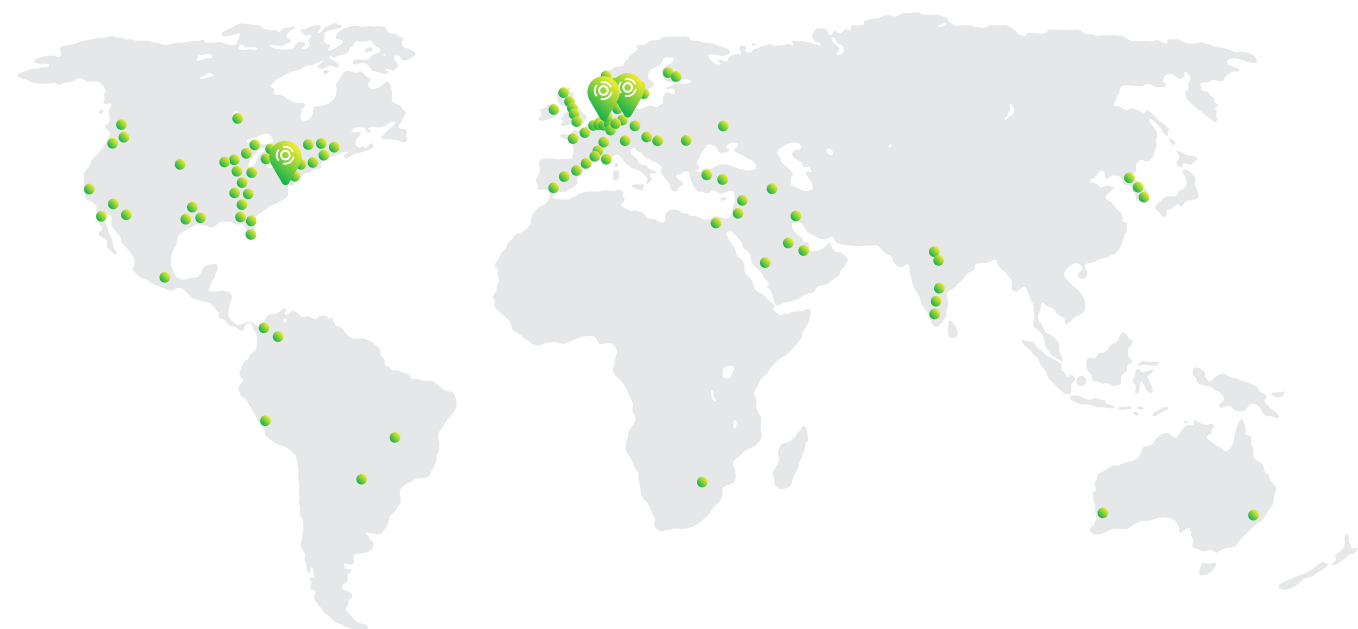
At the forefront of supporting the Radiopharmaceutical Packaging supply chain



Our capabilities at a glance:

- ⦿ A dedicated VGRP team of experts with a deep understanding of your needs
- ⦿ From ready-to-ship solutions to customized packaging journeys
- ⦿ Focus on safety, compliance, and reliability
- ⦿ End-to-end support: design, testing, simulation, production, and certification process
- ⦿ Fully equipped location for production, warehousing, and logistics
- ⦿ Own in-house production of lead containers
- ⦿ No borders. No volume limits

Scaling up for global distribution



Continuous innovation driven by a growing market
The radiopharmaceutical market is evolving rapidly, and so are our Type A packaging solutions. We partner with customers from the earliest clinical trial phases, developing tailored packaging that can grow with increasing demand for commercial distribution.

Scalable to any volume, whenever you need it
'What starts as a small-scale project can become a globally deployed solution for the safe transport of life-saving radiopharmaceuticals for patients.'

Standard where possible Customized where needed



- Continuously evolving type A packaging portfolio
- Choose from our proven range of standard packaging solutions
- Work with our specialists to develop a fully customized solution
- Strong expertise in radiation shielding
- Serving customers worldwide

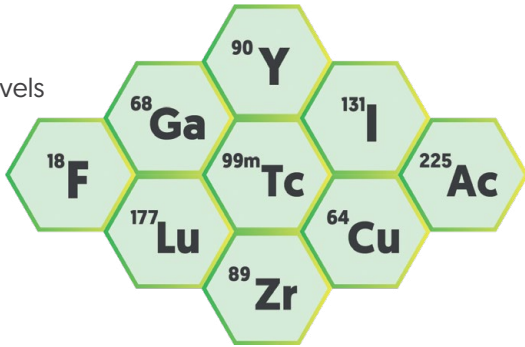
We support every stage of your radiopharmaceutical journey - from clinical trials to commercial distribution.



Our approach from **concept to realization**

Understanding your needs

- ☉ Suitable for diverse radiopharmaceutical types and activity levels
- ☉ Controlled environments
- ☉ Flexible configurations
- ☉ Single-and multi-use solutions
- ☉ Easy handling and operational simplicity
- ☉ Tracking and monitoring



Deciding on the most suitable method of transport and Type A packaging

Our expertise starts with understanding your needs, product requirements, shipping conditions, and production processes. Together with the customer, we define the right requirements and develop a packaging solution **tailored** to the specific application.



Design

Simulation and testing

Packaging solutions are **designed** and **evaluated** to ensure safe performance under real transport conditions, taking into account both product characteristics and logistics requirements.



Test

Certified Type A packaging

Von Gahlen provides **certified Type A packaging solutions** that meet the highest international standards for safety and quality. All systems are **compliant** and fully compatible with hot cell production environments in nuclear medicine and radiopharmacy.



Certification

Development and Type A **testing procedure**

Type A testing involves a series of mechanical tests, including water spray, free drop, stacking and penetration tests, to verify the integrity and robustness of the packaging. This demonstrates its ability to withstand severe conditions and transport accidents.

Von Gahlen Radiopharmaceutical Packaging supports and facilitates the complete testing process, enabling our customers to rely on a fully tested and certified packaging solution.



Additional tests possible:

- ☉ US DOT
- ☉ 95 kPa Pressure test
- ☉ Defined temperature profile tests according to standards such as ISTA 7D or AFNOR

Highest quality and **safety standards**

Our Type A packaging solutions comply with international requirements and regulations

According to the IAEA guidelines:

- ☉ UN-Recommendations – Part 6.4
- ☉ IMDG – Part 6.4
- ☉ ICAO-TI- Parts 6;7
- ☉ ADR - RID – Part 6.4
- ☉ US DOT – e-CFR Title 49 – Parts 173.24a(a)[5], 173.410(i)[2], 173.410(f), 173.412(c), and 178.608

IAEA Safety Standards, Specific Safety Requirements No. SSR-6, Regulations for the Safe Transport of Radioactive Material, 2012, 2018 and 2025 Edition. Moreover, the package can withstand all transportation test in accordance with US DOT e-CFR Title 49, 2024 Edition

Every Type A is delivered with a Certificate of Conformity (CoC)

Type A package

Temperature Controlled

The single-use Type A package with temperature control (+2°C to +25°C) is a complete and flexible solution for the safe, temperature-controlled transport of radiopharmaceuticals. It is constructed from weatherproof and printable corrugated PP board and features integrated sealing systems and handles. The interior is equipped with an EPS foam insert designed to hold up to four lead containers [VG-LP-12 or VG-LP-17].

The package is tested and certified according to the IAEA Safety Standards, Specific Safety Requirements No. SSR-6 and fully complies with ADR/RID, IMDG, ICAO-TI Class 7, and US DOT 49 CFR requirements for the transport of radioactive materials.

- ☑ Suitable for transport by road and air
- ☑ Single-use
- ☑ Outside dimensions 320*320*250 mm [W*D*H]
- ☑ Cost-effective designed
- ☑ Fits up to four individual lead containers [VG-LP-12 or VG-LP-17]
- ☑ Inside EPS foam insert (two parts)
- ☑ Temperature controlled by four cool packs
- ☑ The temperature range is +2°C - +25°C for 72 hours
- ☑ The foam has a cutout for adding a datalogger/GPS tracking system



Model: VG-TYPE-A/TCS-W-D

Our lead containers

All our lead containers are made from recycled lead and can be easily recycled after use. Our lead containers ensure safe transport and the protection of people worldwide against the radiation emitted by radiopharmaceuticals. At the same time, the lead containers ensure that radioactive substances are protected against external influences.

Type VG-LP-12 or VG-LP-17

VG-LP-12	12 mm	33,4*69 mm	57*93,7 mm	2,02 kg
VG-LP-17	17 mm	33,4*69 mm	67*103,7 mm	3,44 kg

Lead containers

- ☑ Suitable for Type A Temperature-controlled packaging
- ☑ Single-use
- ☑ Intended use for transport of vials up to 25 mL, depending on the dimension of the vial
- ☑ Easy to use
- ☑ Standaard colour: RAL9016, other colours upon request



Model: VG-LP-12

Modular Type A package

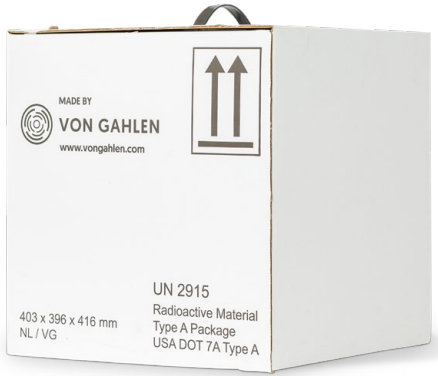
Dry Ice

The single-use modular Dry Ice type A package with temperature control (< -20°C) is a complete and flexible solution for safe transport of radiopharmaceuticals under extreme low temperatures.

It is made of printable cardboard and includes a handle on top. The interior is equipped with EPS foam, a plastic drum, a divider, and a foam cross, and can be filled with dry ice. Lead containers varying from VG-LP-10 to VG-LP-25 fit into the plastic drum.

The package is tested and certified according to the IAEA Safety Standards, Specific Safety Requirements No. SSR-6 and fully complies with ADR/RID, IMDG, ICAO-TI Class 7, and US DOT 49 CFR requirements for the transport of radioactive materials.

- ☑ Suitable for transport by road and air
- ☑ Single-use
- ☑ Outside dimensions 403*396*416 mm [W*D*H]
- ☑ Designed for shipping radiopharmaceuticals under Dry Ice conditions
- ☑ Temperature up to -20°C for 72 hours
- ☑ Flexible modular system
- ☑ Suitable for multiple lead container sizes
- ☑ Polystyrene EPS insulating foam
- ☑ The foam has a cutout for adding a datalogger/GPS tracking system



Model: VG-TYPE-A/TCS-DI

Standard or tailor made?

We provide a standard range of fully certified Type A packaging solutions that fulfill your requirements for transport packaging to ensure your products gets safely to the patient. We can also develop a tailor-made solution together depending on the requirements related to the product, shipping conditions, and the production process.

Lead container

- ☑ Validated with a max. weight up to 8.6 kg
- ☑ Different models available on request (variable by isotope type, activity level, and lead container)
- ☑ Suitable for Modular Type A transport packaging Dry Ice
- ☑ Single-use
- ☑ Intended use for transport of vials up to 30 mL, depending on the dimension of the vial
- ☑ Robust, optimized shipping volume



Robust Type A package

Flight Case

The Type A Flight Case with lead or tungsten container is designed to safely transport high-energy gamma radiopharmaceuticals in vials by road and air. A premium solution for long distances.

The package is tested and certified according to the IAEA Safety Standards, Specific Safety Requirements No. SSR-6 and fully complies with ADR/RID, IMDG, ICAO-TI Class 7, and US DOT 49 CFR requirements for the transport of radioactive materials.

The Flight Case is non-disposable, reusable, and closed with butterfly latches for easy lifting and a tamper-proof seal it also has space for the transportation documentation.

Flight case with lead container
Weight: ± 16 kg



Model: VG-TYPE-A/BVC/FC

Flight case with tungsten container
Weight: ± 21 kg



Model: VG-TYPE-A/BVC-T/FC

Model:
Model: VG-TYPE-A/FC

- ⊙ Suitable for transport by road and air
- ⊙ Re-usable
- ⊙ Outside dimensions: ± 305*305*330 mm [W*D*H]
- ⊙ Suitable for lead and tungsten container [30 mm shielding]
- ⊙ Separate Flight Case with LD45 foam insert
- ⊙ Two spaces for product documentation [in and outside of the transportation packaging]

Deciding on the most suitable method of transport and type a packaging

Two key factors, the half-life time of the medical isotope you want to ship and the length of the journey, play a significant role in determining the most effective and safe solution for your radiopharmaceutical transportation needs.

Lead container

- ⊙ Weight: ± 8,4 kg
- ⊙ Suitable for Flight Case and Click Pack
- ⊙ Multiple use
- ⊙ Plastic insert for easy cleanability
- ⊙ Intended use for transport of vials up to 25 mL with Flight Case, depending on the dimension of the vial
- ⊙ User-friendly, easy to clean yet very robust



Model: VG-TYPE-A/C

Tungsten container

- ⊙ Weight: ± 13,8 kg
- ⊙ Suitable for Flight Case
- ⊙ Multiple use
- ⊙ Plastic insert for easy cleanability
- ⊙ Intended use for transport of vials up to 25 mL with Flight Case, depending on the dimension of the vial
- ⊙ Premium solution for long distances, providing more shielding



Model: VG-TYPE-AT/C

Type A package

Click Pack

The Type A package plastic holder, with a capacity of 15 liters, is designed to safely transport high-energy gamma radiopharmaceuticals in vials by road and air. The plastic holder uses a specially designed lead container allowing for quick filling and transporting up to 20 mL of vials. Our hot cells with a product retrieval drawer are standard suitable for finished product output with these Von Gahlen Type A containers.

The package is tested and certified according to the IAEA Safety Standards, Specific Safety Requirements No. SSR-6 and fully complies with ADR/RID, IMDG, ICAO-TI Class 7, and US DOT 49 CFR requirements for the transport of radioactive materials.

- ⊙ Suitable for transport by road and air
- ⊙ Re-usable
- ⊙ Outside dimensions 338*297 mm [ø*H]
- ⊙ Suitable for lead container [VG-Type-A/C]
- ⊙ Opened and closed by just a quarter turn
- ⊙ The lid can be sealed using a tamper-proof pin as an option
- ⊙ An EPP insert is placed in the plastic holder

Model:
VG-TYPE-A/BVC/B

Plastic holder with lead container
Weight: 10,5 kg



Model: VG-TYPE-A/BVC/B

Lead container

- ⊙ Weight: ± 8,4 kg
- ⊙ Suitable for Click Pack and Flight Case
- ⊙ Multiple use
- ⊙ Plastic insert for easy cleanability
- ⊙ Intended use for transport of vials up to 20 mL [with plastic holder]
- ⊙ User-friendly, easy to clean yet very robust



Model: VG-TYPE-A/C

Note:

A Type A certificate will only be issued if the packaging is supplied as a complete unit, including the transport containers and accessories, not for separately ordered components.

Your reliable partner in certified type a packaging

We have five decades of experience designing and producing radiopharmaceutical packaging solutions that comply with the highest standards regarding quality and safety. All our packaging solutions have an optimal integration with the hot cells we build for nuclear medicine and radiopharmacy



VON GAHLEN
FOR SURE

For more than 50 years, Von Gahlen has been a trusted family-owned company, developing advanced radiation shielding solutions for the radiopharmaceutical industry. Safety, quality and reliability are the foundation of everything we do.

Every day, we are committed to delivering the right solution for every customer. With confidence, dedication and pride, we enable our customers to develop, produce and transport life-saving radiopharmaceuticals safely in controlled and protected environments.

What sets us apart is our ability to combine proven technologies with continuous innovation. Backed by a highly skilled and experienced team, we understand complex challenges and work closely with our customers to develop advanced products and tailor-made solutions.

As a reliable long-term partner, we continuously refine our technologies based on new insights and evolving industry requirements. The result is a portfolio of high-quality solutions that protect people, their working environment and their products, helping our customers operate with confidence today and in the future.

Interested in Type A Radiopharmaceutical Packaging?

Contact us:  vgrp@vongahlen.com |  +31 316 528 275

Von Gahlen Radiopharmaceutical Packaging B.V.
Kelvinstraat 9
6902 PW Zevenaar
The Netherlands

 vgrp@vongahlen.com  www.vongahlen.com

Global headquarters

Von Gahlen Nederland B.V.

 sales@vongahlen.com

 +31 316 528 275

US / Canada

Von Gahlen International Inc.

 vgi@vongahlen.com

 +1 706 517 5695

Germany

Von Gahlen GmbH

 sales@vongahlen.com

 +49 3222 1098 375