



The **decay heat of 1 kg of plutonium** varies dramatically depending on which **isotope** or specific grade you have. Because plutonium is never pure in real-world scenarios, its heat output is a function of its isotopic blend. [1]

Decay Heat by Pure Isotope for Pu

If you are looking at 1 kilogram of a single, pure isotope, the thermal output ranges from a fraction of a watt to hundreds of watts: [1]

- **Plutonium-238 (Pu-238): ~560 to 570 Watts.** Because of this exceptionally high heat density, it is explicitly harvested to power spacecraft via Radioisotope Thermoelectric Generators (RTGs). [1, 2, 3, 4] – *journey to mars*
-
- **Plutonium-239 (Pu-239): ~1.9 Watts.** This is the primary fissile isotope used in nuclear weapons and commercial reactors. [1, 2, 3] - *weapon grade Pu – many leftovers ww*
-
- **Plutonium-240 (Pu-240): ~6.8 to 7.1 Watts.** [1, 2] – *that's probably what we bury Pu 240*
-
- **Plutonium-241 (Pu-241): ~4.2 Watts** (pure initial beta decay). However, it quickly decays into Americium-241, which drives the heat profile up significantly over time. [1] – *hello Americium again – you come back first – Sandia Curves still state of the knowledge*
-
- **Plutonium-242 (Pu-242): ~0.1 Watts.** [1]

All i know as a Building Planner is that it all has to go down decay heat chain.

So that is why we focused on Pu 237 as a benchmark – defining critical mass

That has led to the decision to propose a 1 kg GDF Container – **SAFETY -**

Its all activated heavy metal – how pure is your content ? can you measure ?

There is uncertanties in Nuclear for simple Architecture Building Planners.

We want all tennant-containers proven ever undercritical in GDF and GSF

And earthquake safe – ELB is super safe – and also best ratio net / brutto

i'll be rich soon and then is donate to Wikipedia - thank you for 35 yrs

Plutonium

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This article is about element number 94. For element number 84, see [Polonium](#). For other uses, see [Plutonium \(disambiguation\)](#).

Plutonium is a [chemical element](#); it has [symbol](#) **Pu** and [atomic number](#) 94. It is a silvery-gray [actinide metal](#) that [tarnishes](#) when exposed to air, and forms a dull coating [when oxidized](#). The element normally exhibits six [allotropes](#) and four [oxidation states](#). It reacts with [carbon](#), [halogens](#), [nitrogen](#), [silicon](#) and [hydrogen](#). When exposed to moist air, it forms [oxides](#) and [hydrides](#) that can expand the sample up to 70% in volume, which in turn flake off as a powder that is [pyrophoric](#) (ignites spontaneously in air). It is [radioactive](#) and can accumulate in [bones](#), which makes the handling of plutonium dangerous.

Plutonium was first synthesized and isolated in late 1940 and early 1941, by [deuteron](#) bombardment of [uranium-238](#) in the 1.5-metre (60 in) [cyclotron](#) at the [University of California, Berkeley](#). First, [neptunium-238](#) (half-life 2.1 days) was synthesized, which then [beta-](#)

Plutonium, ⁹⁴Pu



A sample of plutonium metal, shaped like a ring to prevent [nuclear criticality](#)

Plutonium

Pronunciation

/ˈpluːˈtoʊniəm/ ⓘ

(plɒ-TOH-nee-əm)

Pu we melt in 1 kg portions - then pooring melt into GDF Containers - GSF GDF is possible ...

Plasma Elektroden Öfen aufstellen die max 1 kg zum schmelzen aufnehmen.

Entwurf Umpack-Halle anpassen – umstellung von shreddern und Säure

auf Wasserstrahl 3D kalt, unter Flüssigkeit kalt zerschneiden – staubfrei

dann in die 1 kg max. Plasma-Öfen – Automatisierter Vorgang – Apparate-

bau – mit Befüllung der Endlager-Flasche ELB 03 – mit verpacken in PTH 04

Wer will eine nuklear-technische Umpackhalle ansiedeln ?

In einer mittlerweile unbesiedelten Loire-Landschaft FR ?

Behälter-Befüllung – Pu, Spent Fuel, vitrified waste lagern, endlagern.

