

Mendelevium (Md)

Element 101 | Actinide | Period 7 | f-block

Atomic number	101
Atomic mass	[258]
Electron configuration	[Rn] 5f ¹³ 7s ²
Reference isotope	258Md
Density	Unknown
Melting point	1100 K (reported reference)
Boiling point	Unknown
Structure	Bulk crystal structure not experimentally established

Big idea

Mendelevium is element 101 and a search-heavy naming story: it honours Dmitri Mendeleev. The page separates measured nuclear/chemical evidence from unobserved bulk appearance and crystal structure.

Five things to remember

- Atomic number 101 means every mendelevium nucleus has 101 protons.
- The ground-state/reference electron configuration is [Rn] 5f¹³ 7s².
- The representative teaching isotope is 258Md.
- Mendelevium is element 101 and a search-heavy naming story: it honours Dmitri Mendeleev. The page separates measured nuclear/chemical evidence from unobserved bulk appearance and crystal structure.
- Material structure status: Bulk crystal structure not experimentally established.

Structure, evidence and real-world context

No defensible macroscopic crystal lattice is displayed for Mendelevium. Nuclear/atomic evidence and theory are kept separate from unmeasured bulk material properties.

Evidence boundary

Atomic identity and source-reviewed reference values are separated from predictions. Search demand shapes headings and FAQs but never overrides scientific evidence; unknown bulk structure/density/phase values remain visibly unknown.

Where is it used?

Scientific research only - Research-only context; no operational production or handling guidance.

Actinide chemistry studies at atom-scale quantities - Research-only context; no operational production or handling guidance.

Discovery and history

1955 - Albert Ghiorso, Glenn Seaborg and colleagues produced element 101 at Berkeley and named it for Dmitri Mendeleev.

Naming / context - The element name and discovery story are part of the historical record; search-led questions are answered without turning history into scientific evidence for bulk properties.

Today - Current use is described at the level supported by the element's availability and evidence, with research-only elements kept research-only.

Safety / interpretation

This page is educational and non-operational. It provides no radioactive-material production, separation, source-preparation, handling or access instructions.

Search-led questions and review

The questions below reflect genuine learner/search intent. Answers remain source- and evidence-led.

What is the atomic number of mendelevium?

The atomic number is 101, meaning every mendelevium nucleus has 101 protons.

What is the symbol for mendelevium?

The chemical symbol is Md.

What is mendelevium?

Mendelevium is element 101, symbol Md, a synthetic radioactive actinide.

What element was named after Mendeleev?

Mendelevium was named in honour of Dmitri Mendeleev, whose periodic-table work transformed chemistry.

What is mendelevium used for?

Mendelevium has no commercial use; it is used only in scientific research.

What does mendelevium look like?

It is expected to be metallic, but only atom-scale quantities have been produced. No ordinary macroscopic sample or measured bulk crystal structure is presented here.

Quick review

What is Mendelevium's atomic number?

Answer: 101

Atomic number 101 defines Mendelevium by its proton count.

Which statement best describes the material evidence for Mendelevium?

Answer: Bulk crystal structure not experimentally established

The Structure view follows measured/reviewed evidence; unknown bulk structures remain unknown.

What is the safest rule for Mendelevium uses?

Answer: Distinguish the element from its isotopes, compounds and engineered materials

Elemental, isotope-specific and compound properties must not be conflated.

Sources

Royal Society of Chemistry - Mendelevium: <https://periodic-table.rsc.org/element/101/>

NIST - Atomic Weights and Isotopic Compositions: https://physics.nist.gov/cgi-bin/Compositions/stand_alone.pl

IUPAC - Periodic Table of Elements: <https://iupac.org/what-we-do/periodic-table-of-elements/>