

Expansion plans of the world's top PFAS producers

ChemSec's research demonstrates that, with very few exceptions, the major producers are expanding their PFAS capacity, driven by three main sources of demand:

- AI and data-centre infrastructure (immersion cooling fluids, thermal management)
- Semiconductor manufacturing (surfactants, etching, cleaning, tubes and fittings)
- Lithium-ion battery materials (PVDF binders and coatings).

Geographically, expansion is taking place in the US, Europe, Japan, India, and China. Companies such as Chemours, Syensqo, Arkema, Solstice, Daikin, and AGC are explicitly framing their PFAS investments around “the AI revolution” and chip fabrication, filling the gap left by 3M's departure from this market.

Battery-grade PVDF is a parallel growth area, with major facilities or expansions recently constructed, under construction, or ramping up production in the US (Georgia), France, North America, and China.

The only clear exceptions are the Swiss company Archroma, which is marketing PFAS-free alternatives, and BASF, which has announced it will exit PFAS production by 2028.

Companies are listed below in alphabetical order:

AGC

Last year, this Japanese multinational [started operations](#) at the [€188m expansion](#) of its Chiba plant in Ichihara, Japan, increasing ETFE and PVDF capacity (both are types of fluoropolymer, or PFAS plastic) specifically for Japan's semiconductor industry. In June 2026, the company [promised](#) “new product launches and the expansion of existing products” in performance chemicals for the semiconductor sector.

In June, 2026, AGC [opened a new factory](#) in Kitakyushu, Japan, to produce fluorinated membranes used to make hydrogen. AGC invested €80m and foresees “further capacity expansion” for this product.



Archroma

This Swiss multinational is privately owned, so we know even less than usual about what it produces. However, the US FDA revealed that Archroma [stopped selling food-contact materials](#) containing PFAS in 2021, and is now marketing [several PFAS-free textile products](#).

At a trade fare in 2024, it stated: “It is well known that in our industry there is a strong pressure to step out from fluorine based oil and water repellents wherever possible and to [move towards more sustainable PFAS-free](#) technologies.”

Arkema

In the summer of 2026, French multinational Arkema [completed](#) a \$20m investment to [increase PVDF capacity in North America](#) (that’s those PFAS plastics again) by 15% to meet demand for their use in lithium-ion batteries and the expanding semiconductor and electronic cable markets.

Earlier this year, it announced a 20% [expansion of PVDF production capacity in China](#), scheduled to begin operations in 2028. This is to meet “strong and accelerating demand” from sectors including lithium-ion batteries for electric vehicles and storage batteries, semiconductor manufacturing, and other applications.

In August 2025, Arkema opened a [new \\$60m production unit](#) in Kentucky to make HFOs – short for hydrofluoroolefins, PFAS gases used in refrigeration and air-conditioning systems – making it one of the world’s largest producers of a particular HFO called R-1233zd. The company said this “will enable us to follow the rapid expansion of data centers [sic] cooling needs”. (Somewhat confusingly, these PFAS gases are also known as F-gases.)

BASF

The world’s largest chemical company, based in German, continues to be hush-hush about its stated intention to “phase out chemical products formulated with PFAS”, ostensibly by 2028.

However, a scandal at BASF’s pesticides plant in Normandy seems to have forced the company to say it will try to substitute TFA – a [hugely problematic](#) so-called short chain PFAS – with alternatives. The plant released large quantities of TFA into the river Seine, prompting local protests in November 2025.



Following these protests, in a [statement dated March, 2026](#), the company said: “BASF has initiated an R&D study aiming to completely replace TFA in the production process in the long term.”

Chemours

US PFAS producer Chemours in 2019 [tripled its production capacity](#) for its flagship HFO refrigerant, branded Opteon, which has since seen a sharp rise in sales. The company is about to launch Opteon 2P50, which it claims will “[revolutionise](#)” data centre cooling. This product aims to address [growing demand](#) from advanced data centres and AI hardware. (It has already met with [stiff opposition](#) from environmental groups.) The company operates one of the world’s largest HFO production facilities, and said this year it “will continue investing [to meet rising global demand](#)”.

In September, 2025, Chemours requested authorisation to [increase production](#) of vinyl ethers by between 40% and 100%. These chemicals are used to make fluoropolymers (those PFAS plastics), sales of which the company forecasts will continue to [increase annually](#) by between 5% and 9%, driven by continued strength in data centre and semiconductor markets.

In late 2024, the company [completed expansion](#) of capacity at its Virginia Teflon plant to meet rising semiconductor-driven demand. Teflon, of course, is a PVDF plastic much better known as a non-stick coating for frying pans. But it has industrial uses too. Since expanding capacity, Chemours says it has “[ramped up production](#)”.

Daikin

In April 2026, Japanese multinational Daikin announced plans to [more than triple its production capacity](#) for perfluoroelastomers (another kind of PFAS rubber or plastic) by 2027 in response to anticipated growth in demand driven by the expanding semiconductor market. It is building a [new production facility](#) for this stuff in Japan at its Kashima Plant in Ibaraki, with commercial product supply set to start in 2027.

The company will launch a “data centre hub” this year to [expand sales](#) of equipment in the data centre market, where demand is strong. Daikin is [expanding its DAISAVE HFO product lineup](#) with more grades and applications, especially for data-centre immersion cooling, and is actively marketing it.

The company stated in May, 2026: “In the rapidly growing essential markets of semiconductors and data centers [sic], we will maintain and [expand our top share](#) in the industry by expanding sales of existing fluorine products and introducing new products...”



Dongyue

Between 2021 and 2025, the Chinese conglomerate invested about €300m in [expanding production capacity](#) for PVDF and PTFE (PFAS plastics again). In August 2025, it invested a further €21m on [increasing capacity](#) for producing high-end PTFE “that can be utilised in the semiconductor industry” and pilot production of tetrafluoropropylene, a PFAS gas or F-gas used mainly in vehicle air conditioning.

This appears to be part of a broader push by Chinese producers including Dongyue, Zhejiang Juhua and Sinochem to [scale up HFO-1234yf production](#).

During 2025, Dongyue began production of a [fluorinated fluid called FC3283](#), primarily used in semiconductor manufacturing, electronic device testing, and... liquid cooling for data centres.

Gujarat Fluoropolymers

In Q2 2026, fluoropolymer revenue for this India-based chemicals giant [grew 15%](#) year-on-year, and the company expects [continued sales growth](#) of 17% to 20% annually going forward. [Expanded capacity](#) to produce a PFAS gas / F-gas called R134a is expected to come online by March, 2027.

In August 2026, the CEO told investors there are opportunities in what he called “sunrise sectors”, namely batteries, data centres, semiconductors and green hydrogen. “We will be adding capacities going forward, mostly in [a] new set of fluoropolymers... There is [a tremendous growth opportunity](#) there,” he said.

HaloPolymer

Russian PFAS producer HaloPolymer reveals very little about its production, which, despite the company’s size and importance on the domestic market, appears to be rarely covered by Russian business media. The company’s [stated aim](#) is “increasing the volume of manufactured products for domestic and foreign markets, as well as expanding the range of manufactured products”.

In August 2024, the company [issued a tender](#) to increase its production of fluoroelastomers (PFAS plastics and rubber), but included minimal details.



Orbia Fluor & Energy Materials

Mexican multinational Orbia is actively expanding its fluorochemical production, particularly aimed at batteries and electric vehicles. In December 2025, Orbia [completed an expansion](#) of its fluorinated battery electrolyte facility in Wisconsin, roughly tripling the site's production capacity. When originally proposed, this investment was said to be worth [\\$800 million](#).

In September, 2024, Orbia [launched](#) its new Klea Edge range of HFOs for vehicle air-conditioning and commercial refrigeration. Since then, the company has been tight-lipped about production and investment, but it is actively marketing these products.

In late 2024, Orbia [announced](#) construction of a new “multi-million pound” facility in the UK to produce a new PFAS aerosol propellant for the pharmaceutical industry, to be completed late 2026. The company says its priority is to “[accelerate the scale-up](#)” of production of this new substance. Revenue from its fluorine materials business group [grew 11%](#) during 2025.

Solstice

The goal of this spin-off from US multinational Honeywell was “to [unleash the full growth potential](#) of Solstice”. The company's flagship products are the Solstice® range of HFOs, PFAS gases used as refrigerants in a wide range of applications.

The company has aggressive growth plans, launching a major acquisition of Element Solutions in July 2026 which positions Solstice [within the AI supply chain](#), providing everything from packaging and thermal management capabilities to data centre cooling technology.

The CEO said: “The current chip fabrication demand is so strong and so the upside from AI is so strong . . . We have complete solutions for [this generational growth opportunity](#).”

Syensqo

In 2024, helped by a US government grant of \$178 million, this Belgian multinational invested an unknown amount in building a new [battery-grade PVDF](#) manufacturing facility in Augusta, Georgia. This is expected to be [completed in 2027](#), when it will become the largest PVDF production facility in North America, supplying PVDF for use as a lithium-ion binder and separator coating in EV batteries.

In 2022, Syensqo announced a €300 million investment to expand its PVDF capacity at Tavaux, France, to 35 kilotons, creating the largest PVDF production site in the region. The investment was “to capitalize on the growing demand for electric and hybrid vehicles”, the company said,



and that it was [aiming to grow its sales](#) to this market from €800 million in 2021 to more than €2.5 billion by 2030. Operations at the expanded plant were due to commence this year.

In response to 3M leaving the data centre cooling market, the company has invested in a modest expansion of its production of its Galden brand, a PFAS cooling fluid, at its site in Italy. In early 2025, the CEO boasted about how Syensqo has “[secured new long-term contract wins](#)” for Galden.

Through 2025–26, Syensqo has promoted Galden at trade shows in Taiwan and China, claiming that it is “[powering the AI revolution](#)” through data centre cooling and semiconductor manufacture.