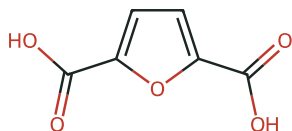


WHAT CHANGED THIS MONTH

One development passed the evidence check: Avantium's first FDCA batch at a commercial-scale plant, a supply milestone for PEF. Two shortlisted research leads, a PLA/PA11 blend and a PHBV strain study, still await their evidence check.



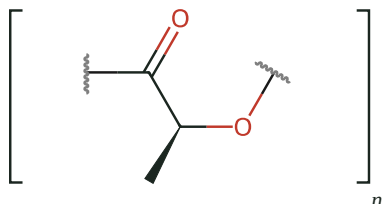
2,5-Furandicarboxylic acid (FDCA)

Avantium's FDCA flagship plant makes its first batch

Change Avantium reports that its Delfzijl FDCA Flagship Plant produced a first FDCA batch on 28 September, after commissioning all major process units. ¹

Implication PEF's key monomer moves from pilot to commercial-scale start-up; the company expects commercial sales toward the end of 2026.

Gap Design capacity, actual output, qualification results and a bounded LCA are not disclosed; ramp-up is guided at 12-24 months.



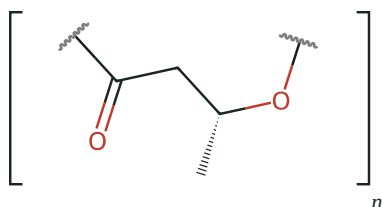
Poly(L-lactide) - route reference structure, not specific to this lead

Candidate for evidence check · PLA, lactide copolymers & blends · new-formulation-or-application

Simultaneous Compatibilization and Toughening of Renewable PLA/PA11 Blend via Core-Shell Biobased Nanosilica-Filled Elastomer

“Simultaneous Compatibilization and Toughening of Renewable PLA/PA11 Blend via Core-Shell Biobased Nanosilica-Filled Elastomer” ²

Evidence record empty - Change / Implication / Gap will be written only after the primary source is checked.



Poly[(R)-3-hydroxybutyrate] (PHB) - route reference structure, not specific to this lead

Enhancing 3-hydroxyvalerate concentration in poly(3-hydroxybutyrate-co-3-hydroxyvalerate) by *Pseudomonas aeruginosa* strain 78B using volatile fatty acids with papermill effluent blackliquor

“Enhancing 3-hydroxyvalerate concentration in poly(3-hydroxybutyrate-co-3-hydroxyvalerate) by *Pseudomonas aeruginosa* strain 78B”³

Evidence record empty - Change / Implication / Gap will be written only after the primary source is checked.

COMPARISON

Entity / polymer	Production geography	Demonstrated scale	TRL	Capacity / status	Cost / basis	Climate / boundary
PEF (FDCA monomer for poly(ethylene furanoate))	Delfzijl, the Netherlands	industrial	Not reported	Not disclosed commissioned	Not disclosed	Not disclosed

ND = not disclosed. Capacity is nameplate unless the status says actual output.

WATCHLIST

- Avantium FDCA plant: batch-to-continuous operation and first commercial deliveries (company expects end of 2026).

FOLLOW-UP QUESTIONS

- What design capacity and actual output will Avantium report once the plant runs continuously?
- Which system boundary and functional unit underlie Avantium's PEF footprint claims?

EDITORIAL NOTES

- Trial issue. Only the Avantium item is evidence-checked; nothing is signed. The technical reviewer, delivery date and distribution channel are still OPEN (G4).
- Cross-issue novelty could not be checked — first issue.
- September triage stopped at the 60-call budget: records still marked 'triage pending' may contain further candidates.
- Evidence-checked by the build editor on 2026-10-20 from Avantium's own releases; three syndicated news reports of the same start-up were collapsed onto them. Not signed.
- Issue stays 'draft' until the two remaining shortlisted leads are checked or dropped and a reviewer signs.

REFERENCES

- [Avantium produces first FDCA batch at its Delfzijl Flagship Plant](#)
- [Simultaneous Compatibilization and Toughening of Renewable PLA/PA11 Blend via Core-Shell Biobased Nanosilica-Filled Elastomer](#)
- [Enhancing 3-hydroxyvalerate concentration in poly\(3-hydroxybutyrate-co-3-hydroxyvalerate\) by *Pseudomonas aeruginosa* strain 78B using volatile fatty acids with papermill effluent blackliquor](#)