







Some sources for questioning “advanced recycling” of plastics.

The first six entries below have been supplied by journalist and writer Kristina Marusic:

1.  Pyrolysis for Recycling.pdf
Dr. Eric Beckman, Chemical Engineering Dept., University of Pittsburgh
“A Primer on Pyrolysis for Chemical Recycling of Polymers”
2.  US Briefing on Chemical Recycling_Embargoed_July 22 (2).pdf
Patel, D., Moon, D., Tangri, N., Wilson, M. (2020).
“Plastic Alchemy: The Deception of the Chemical Recycling Industry”
3.  Recycling Lies - NRDC report.pdf
Natural Resources Defense Council (NRDC), (2022).
“Recycling Lies: ‘Chemical Recycling’ of Plastics is just Greenwashing Incineration”
4.  2023 Toolkit to Combat Plastic Burning _ Chemical Recycling.pdf
“2023 Toolkit to Combat Plastic Burning. a.k.a. ‘Chemical Recycling’ or ‘Advanced Recycling’
”
5.  Fact Check on ACC Claims on Advanced Recycling (November 2 2022).docx.pdf
Jan Dell, The Last Beach Cleanup (lastbeachcleanup@gmail.com) (2022).
“Fact Check on American Chemical Council Claims on Advanced Recycling”
6.  Public Interest Research Group.docx.pdf
Public Interest Research Group (PIRG) (2023).
“ ‘Chemical Recycling’: What You Need to Know”

The next two entries, 7 and 8, are from technical journals. They are listed simply to highlight that hazardous and carcinogenic compounds, the furans and dioxins, are produced when bringing waste materials, particularly plastics, to the temperatures encountered in both incineration and pyrolysis. Entries 9 and 10 are two general guides to nature of furans and dioxins.

7. Shibamoto, T., Yasuhara, A. and Katami, T. (2007) “Dioxin Formation from Waste Incineration” Review of Environmental Contamination and Toxicology, 190:1-41
Abstract online at [Dioxin formation from waste incineration - PubMed](#)
8. Lopes, E. J., Okamura, L. A., and Yamamoto, C. I. (2015) “Formation of Dioxins and Furans during Municipal Solid Waste Gasification” Brazilian Journal of Chemical Engineering, Vol. 32, No. 01, pp. 87 - 97, January - March, 2015, [dx.doi.org/10.1590/0104-6632.20150321s00003163](https://doi.org/10.1590/0104-6632.20150321s00003163)
9. “Dioxins, Furans and Dioxin-Like Polychlorinated Biphenyls Factsheet”
U.S. Department of Health & Human Services
https://www.cdc.gov/biomonitoring/DioxinLikeChemicals_FactSheet.htm
10. “Dioxins and Furans”
[Dioxins and Furans - Canada.ca](#)