Oxo-degradable Plastics Cause Environmental Pollution

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Oxo-degradable Plastic

- Made with conventional plastic: high density polyethylene (HDPE), low density PE (LDPE), polypropylene (PP), polystyrene (PS), polyethyleneterephtalate (PET), polyvinylchloride (PVC)
- Includes additives that promote oxidation of the material, triggered by UV light, heat, and oxygen
- Product becomes brittle and fragments
- Oxo-degradable certification tests provide no pass/fail criteria: no time limit, no percent degradation
- Independent third party standard ASTM & ISO test data show small percent or no film fragments utilized by soil microorganisms

3 years after oxo-degradable mulch application, Everett, WA Photo by Andy Bary

Oxo-degradable Plastic Mulch


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FTC Concludes ECM BioFilms Made False, Misleading, and Unsubstantiated Claims About the Biodegradability of Plastic Products Treated with Its Additive

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The Impact of the Use of "Oxo-degradable" Plastic on the Environment

Final Report for the European Commission DG Environment. Project conducted under Framework Contract No ENV.A.2/FRA/2015/0008 and 07.0201/2016/748104/ETU/ENV.B.3.

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- FTC concluded company making false and unsubstantiated claims about oxo-plastics
- Does not undergo biodegradation
- Not suitable for composting or anaerobic digestion
- Recommend prohibition of sales into markets where plastics are recycled:
  - Reduces quality of plastics recyclate
  - Cannot be identified and separated
- Ellen MacArthur Foundation with 150+ organizations refute claims of oxo-degradable plastics and ask for ban of oxo-degradable packaging in U.S.
- Micro and macro plastics from oxidative degradation build up on land and ocean environments, absorb toxins, and can be transported up the food chain

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www.biodegradablemulch.org

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