



Polystyrene Fact Sheet

Brought to you by the Environmental Commission



Polystyrene is...

...a petroleum-derived plastic-like material used for packaging. The foam form - know as expanded polystyrene (EPS) - is commonly used to make disposable plates, cups, bowls and other items (1).

...commonly known as Styrofoam, the Dow Chemical Co. brand of the product (1).

Health facts...

Styrene (a chemical in polystyrene) is a health concern in polystyrene manufacturing plants, where workers can inhale styrene (2).

Styrene migrates into food at low levels (3), below those levels at which the EPA and the WHO declare it a concern (4) (5).

Styrene has been declared "possibly carcinogenic to humans" (2).

Children are likely to be more sensitive to the health effects of styrene, as is the case with other neurotoxins (6).

Waste facts...

Nearly 3 million tons of polystyrene products are disposed of annually in U.S. landfills; One-third of this is plates, cups and other food ware (7).

Polystyrene never degrades in modern landfills. It can only photodegrade, meaning it needs to be exposed to light in order to dissolve, which won't happen in today's landfills (8).



Polystyrene (a #6 plastic) can be recycled, but not after use with food. Ultimately, less than 1% of polystyrene gets recycled (7).

(See other side for things you can do!)

What you can do to help...

Bring a reusable travel mug with you.

Carry reusable containers with you to restaurants for bringing home leftovers, to avoid the polystyrene clamshells.

Lobby your school or office cafeteria to use paper or, even better, reusable plates, cups, bowls and silverware.

Write to your favorite take-out restaurant to let them know of the environmental consequences of using polystyrene containers and ask them to consider paper or other biodegradable alternatives.

What others have done...

Portland, Oregon, has banned polystyrene containers in restaurants and grocery stores that prepare food (9).

A school district in Davis, California, has eliminated polystyrene lunch trays, resulting in a savings of almost \$3000 for just a single, small elementary school (10).

The Portland, Oregon, school district has replaced disposable trays with reusable ones with the help of community volunteers to wash trays (11).

For more information about the activities of the City of Bloomington Environmental Commission, visit our website: <http://bloomington.in.gov/environment>

Sources:

- http://your.kingcounty.gov/solidwaste/greenschools/documents/polystyrene_facts.pdf
- <http://monographs.iarc.fr/ENG/Monographs/vol82/index.php>
- <http://www.atsdr.cdc.gov/phs/phs.asp?id=419&tid=74>
- Duffy, E. & M.J. Gibney. 2007. *Food Add. & Contam. A*, 24(2):216-225.
- Tang, W., et al. 2000. *Toxicology*, 144(1-3):39-50.
- Colborn, T., et al. 1993. *Env. Health Persp.*, 101(5):378-384.
- Although this is less than 1% by weight of landfilled materials, polystyrene likely takes up a much greater proportion of landfills in volume: <http://www.epa.gov/epawaste/nonhaz/municipal/pubs/msw2008data.pdf>, Table 7.
- http://www.americanchemistry.com/s_plastics/doc_pfpg.asp?cid=1417&did=5332
- <http://www.portlandonline.com/bps/index.cfm?a=109474&c=41472>
- <http://www.calrecycle.ca.gov/Organics/Food/CaseStudies/Contracts/2000/Davis2.pdf>
- <http://www.pps.k12.or.us/departments/facilities/3247.htm>