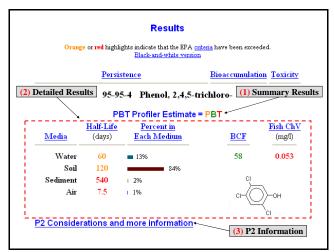
~ The PBT Profiler ~

EPA's Sustainable Futures Initiative

http://www.epa.gov/oppt/sf uses the Persistent (P), Bioaccumulative (B), and Toxic (T) Chemical (PBT) Profiler, an on-line screening tool that estimates persistence, bioaccumulation, and chronic fish toxicity. The opening screen of the PBT Profiler, available at www.pbtprofiler.net, is shown on the right. Developed jointly by the chemical industry, NGOs and the Agency, the PBT Profiler is one of the most widely used chemical screening tools in the world.

The PBT Profiler has undergone rigorous scientific peer review. The results of the peer review are available through the Federal Docket Management System (FDMS) on-line at www.regulations.gov by searching All Documents for "PBT Profiler".



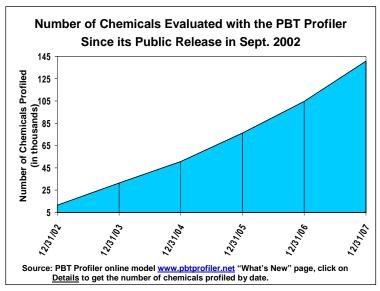
Sample Summary Results Page

The PBT Profiler model's on-line web site explains the intended purpose and use of the model, and information to encourage proper use of the model. Chemicals can be entered in the model using CAS Registry Number, SMILES Notation, or by drawing the structure with the integrated drawing program. Chemicals that are not appropriate for running in the PBT Profiler are clearly described, and flags are incorporated so that if a user enters an inappropriate chemical (such as a metal, a mixture, or a chemical with a molecular weight over 1,000) that chemical is clearly identified to the user as inappropriate for screening with the PBT Profiler. Highly praised by industry and environmentalists, OPPT has seen a dramatic increase in the use of the PBT Profiler screening tool. The PBT Profiler



Opening screen of the PBT Profiler

The PBT Profiler estimates physical / chemical and environmental fate properties (Persistence: WS, Kow, VP, Henry's Law constant, OH• and O3 reaction rates, MP, MW, and ultimate biodegradation); Bioaccumulation: Fish BCF; and Toxicity: fish chronic value (ChV) from ECOSAR. It uses a level 3 multimedia model to estimate distribution in water, soil, sediment, and air and compares P, B, and T estimates to EPA criteria and formats results in color-coded output (Summary Results). As shown on the sample results page to the left, quantitative estimates of P, B, and T are provided (Detailed Results – within the dashed line) and information relevant to Pollution Prevention (P2) assessments is available by clicking on the P2 Considerations and more Information link.



was released in September 2002, and since public release nearly 145,000 chemical-specific PBT analyses have been performed by chemical manufacturers and other stakeholders.

For more information contact:

Bill Waugh, 202-564-7657, <u>waugh.bill@epa.gov</u>; Kelly Mayo, 202-564-7662, <u>mayo.kelly@epa.gov</u>, Maggie Johnson, 202-564-8924, johnson.maggie@epa.gov