

Biodegradation Probability Programs¹

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This set of programs comes in a two disk set whether you get the Windows version or the MS-DOS version. The main disk for each loads the base program into a directory called EST, short for Estimate. The SMILECAS Database is the same for both versions and loads into the VEST directory for use by the biodegradability estimation program. The only problem I encountered in installing the Windows version was in its conflict with the compression utility in DOS 6.2. I had to load the program into drive H, the uncompressed partition, before it would run successfully. Also, the windows antivirus program of DOS 6.2 needs to be turned off during loading due to its falsely reading changes made by the installation program of BIOWIN, the windows version of this biodegradability program. I was able to overcome the antivirus conflict by updating the information used by it to include the changes made by BIOWIN. After successfully loading the DOS version, I was able to run it from either the C:\ prompt and also as an ICON in windows. It worked well both ways. Both versions of this program do the estimations for biodegradability with ease. I did have to spend some time reading about Syracuse's implementation

of SMILES that allows you to use text to simulate a chemical formula. After getting used to the SMILES protocol, it was easy to enter any organic chemical to get an estimate of its biodegradation probability. The CAS number option also helped to get to a particular compound number quickly. Since Syracuse worked with EPA and used up-to-date information to program their estimation calculation, the results from each calculation are the best information we can currently generate.

For a chemical hygiene officer or an environmental safety professional, this program will give more exacting data about a particular chemical and its effect on the environment. I definitely recommend its use and will continue to use it myself.

REFERENCES AND NOTES

- (1) Syracuse Research Corporation, Merrill Lane, Syracuse, NY 13210-4080, Phone: 315-426-3200. The software reviewed is for the PC (Windows and MS-DOS), Version 3.5, Aug 1994. The price of this software package is \$400.

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