Nematode (Caenorhabditis Elegans) Toxicity Studies

Readme File for Supporting Data Files

Introduction

As part of the West Virginia Chemical Spill research program, NTP evaluated six chemicals that were spilled into the Elk River in West Virginia along with structurally related chemicals and mixtures for their ability to affect growth and development, feeding, and reproduction at different developmental stages in the nematode or roundworm *Caenorhabditis elegans* (*C. elegans*). A summary of the study findings was reported in a March 2015 update.

Data Files Available for Download

A set of supporting data files for nematode toxicity studies is available on this NTP data Web page. The files include summary boxplots for each chemical's effect on feeding, growth, and reproduction. The summary files are available as PDFs while the corresponding data are available as Microsoft Excel files. The key worksheet within each Excel file provides an explanation of variables.

The data Web page also provides the following methods files: (1) a "Chemical Methods" file that covers chemical procurement, analysis, and formulation for all chemicals used in the research program and (2) a "Materials and Methods" file that lists what was studied and describes the methods for each study.

Files can be downloaded individually or as a complete set for the study by using the *Download All* button. If you need assistance with the data files, please contact CEBS-Support@mail.nih.gov.

Access to Data Online

All data are available in the <u>Chemical Effects in Biological Systems (CEBS) database</u>. Data from additional studies conducted on the chemicals are accessible by searching CEBS using the Chemical Abstracts Service Registry Number (CASRN) or chemical name (see Table 1).

Table 1. Elk River Spill Chemicals and Structurally Related Compounds Tested in C. elegans Assays

CASRN	Compound Name
34885-03-5	4-Methylcyclohexanemethanol (MCHM)
51730-94-0	Dipropylene glycol phenyl ether (DiPPh)
770-35-4	Propylene glycol phenyl ether (PPH)
105-08-8	1,4-Cyclohexanedimethanol
98955-27-2	4-Methoxymethylcyclohexanemethanol
4331-54-8	4-Methylcyclohexanecarboxylic acid
114651-37-5	Cyclohexanemethanol, 4-[(ethenyloxy)methyl]-
498-81-7	Cyclohexanemethanol, alpha, alpha, 4-trimethyl-
94-60-0	Dimethyl 1,4-cyclohexanedicarboxylate
4169-04-4	Phenoxyisopropanol
CRUDEMCHM*	Crude 4-Methylcyclohexanemethanol (Crude MCHM)
NA	DOWANOL™ DiPPh

^{*} This is a CEBS identification number, because this chemical formulation does not have a specific CASRN.

Suggested Citation

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https://tools.niehs.nih.gov/cebs3/data_review/index.cfm?action=main.dataReview&bin_id=727 [accessed *INSERT DATE*].