EnviroChem & Cancer Database (ECCD)

BCERF’s fact sheet number 45 addresses why there is concern about environmental chemicals and the risk of breast cancer. As a part of this fact sheet, a table listed the chemicals that are known to cause breast tumors in laboratory animals. This information was compiled from the National Toxicology Program’s cancer animal bioassay results. The EnviroChem and Cancer Database (ECCD) provides additional information for these 42 chemicals including major uses, cancer classification, whether the chemical is currently produced or when it was taken off the market, use in manufacturing and consumer products, exposures of concern, and an overview of workplace regulations and advisories by the Occupational Safety and Health Administration (OSHA). Because this spreadsheet provides a “snapshot” of information on these chemicals, it should be considered to be a starting point for those seeking information on cancer risk. The user should refer to the Material Safety Data Sheets (MSDS) for information on the toxicology and precautions to be used when handling these chemicals or products that contain these chemicals <http://msds.pdc.cornell.edu/msdssrch.asp>.

A searchable, interactive version of this spreadsheet is available on the BCERF web site at: <http://envirocancer.cornell.edu/ECCD/chemsearch.cfm>.

This spreadsheet was developed by Michael Goldman as a part of an undergraduate independent study project under the supervision of Suzanne Snedeker, Ph.D., BCERF Associate Director for Translational Research.
Abbreviations
(Abbreviations are listed as they appear across the spreadsheet column headings from left to right)

**MSDS** (referred to in the abstract) stands for Material Safety Data Sheets.

**CAS #** stands for Chemical Abstract Service Registry Number, a unique number assigned to each chemical.

**DHHS** stands for the Department of Health and Human Services.

**NTP** stands for the National Toxicology Program.

**RoC** stands for the *Report on Carcinogens*. The DHHS and the NTP, together with the Public Health Service, are responsible for compiling a biennial report on substances that are known to be or that are reasonably anticipated to be human carcinogens.

**NTP TR #** stands for the National Toxicology Program Technical Report Number. Each set of studies (Technical Report) evaluating the cancer causing potential of a particular chemical is assigned a unique number.

**IARC** stands for the International Agency for Research on Cancer, Lyon France.

IARC works with international experts who critically review and evaluate the cancer risk of chemicals, other agents and mixtures and workplace exposures. Based on the strength of the scientific evidence from human, laboratory animal, and related studies, chemicals/agents are classified in one of the following categories:

- **GROUP 1** Carcinogenic to humans
- **GROUP 2A** Probably carcinogenic to humans
- **GROUP 2B** Possibly carcinogenic to humans
- **GROUP 3** Not classifiable as to its carcinogenicity to humans
- **GROUP 4** Probably not carcinogenic to humans

A detailed explanation of the IARC cancer classification system is available in the Preamble section of published monographs or is available on-line at: <http://monographs.iarc.fr/monoeval/eval.html>.

**OSHA** stands for Occupational Safety and Health Administration.

Key References


IARC Monographs Program on the Evaluation of Carcinogenic Risks to Humans at: <http://monographs.iarc.fr/htdig/search.html>. Website can be searched by entering either chemical name, CAS # or synonym.

MSDS, Material Data Safety Sheets, a free searchable interface of 250,000 entries is maintained by Cornell University is available at: <http://msds.pdc.cornell.edu/msdssrch.asp>. A useful glossary of terms: <http://www.umt.edu/research/files/environ/appendic.htm >.


- OSHA Information regarding EXPOSURE LIMITS, which are set by OSHA regarding a worker's permissible exposure limit to a hazardous chemical in the workplace can be found at: <http://www.osha.gov/dts/chemicalsampling/toc/toc_chemsamp.html>. Chemicals can be searched alphabetically or CAS #.

NTP Technical Report Abstracts of “Chemicals Associated with Site-Specific Tumor Induction in Mammary Gland” linked to a list of these chemicals at: <http://ntp-server.niehs.nih.gov/htdocs/sites/mamm.html>.