

## 9. REFERENCES

- Abraham MH, Ibrahim A, Acree WE. 2005. Air to blood distribution of volatile organic compounds: A linear free energy analysis. *Chem Res Toxicol* 18(5):904-911.
- ACGIH. 1992. 1992-1993 Threshold limit values for chemical substances and physical agents and biological exposure indices. Cincinnati, OH: American Conference of Governmental Industrial Hygienists, 21.
- ACGIH. 2002. Ethylbenzene. Documentation of the threshold limit values for chemical substances and physical agents and biological exposure indices. 7th ed. Cincinnati, OH: American Conference of Governmental Industrial Hygienists.
- ACGIH. 2006. Ethylbenzene. Threshold limit values for chemical substances and physical agents and biological exposure indices. Cincinnati, OH: American Conference of Governmental Industrial Hygienists, 29, 104.
- Acton DW, Barker JF. 1992. In situ biodegradation potential of aromatic hydrocarbons in anaerobic groundwaters. *J Contam Hydrol* 9:325-352.
- Adinolfi M. 1985. The development of the human blood-CSF-brain barrier. *Dev Med Child Neurol* 27(4):532-537.
- Adlercreutz H. 1995. Phytoestrogens: Epidemiology and a possible role in cancer protection. *Environ Health Perspect Suppl* 103(7):103-112.
- Agency for Toxic Substances and Disease Registry. 1989. Decision guide for identifying substance-specific data needs related to toxicological profiles; Notice. Agency for Toxic Substances and Disease Registry, Division of Toxicology. *Fed Regist* 54(174):37618-37634.
- Agency for Toxic Substances and Disease Registry. 1990. Biomarkers of organ damage or dysfunction for the renal, hepatobiliary and immune systems. Subcommittee on Biomarkers of Organ Damage and Dysfunction. Atlanta, GA: Agency for Toxic Substances and Disease Registry.
- Agency for Toxic Substances and Disease Registry. 1992. Toxicological profile for styrene. Agency for Toxic Substances and Disease Registry. <http://www.atsdr.cdc.gov/toxprofiles/tp53.pdf>. August 02, 2007.
- Agency for Toxic Substances and Disease Registry. 1995. Toxicological profile for gasoline. Agency for Toxic Substances and Disease Registry. <http://www.atsdr.cdc.gov/toxprofiles/tp72.html>. August 14, 2007.
- Altman PL, Dittmer DS. 1974. Biological handbooks: Biology data book. Vol. III. 2nd ed. Bethesda, MD: Federation of American Societies for Experimental Biology, 1987-2008, 2041.

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\*Not cited in text

## 9. REFERENCES

American Chemistry Council. 2007. Voluntary children's chemical evaluation program (VCCEP). Tier I pilot submission for ethylbenzene. American Chemistry Council. Toxicology Excellence for Risk Assessment.

<http://www.tera.org/Peer/VCCEP/Ethylbenzene/VCCEP%20Ethylbenzene%20Revised%20Doc%20-august%2010%202007.pdf>. February 10, 2009.

\*Amoore JE, Hautala E. 1983. Odor as an aid to chemical safety: Odor thresholds compared with threshold limit values and volatilities for 214 industrial chemicals in air and water dilution. *J Appl Toxicol* 3:272-290.

Andersen ME, Krishnan K. 1994. Relating *in vitro* to *in vivo* exposures with physiologically based tissue dosimetry and tissue response models. In: Salem H, ed. *Animal test alternatives: Refinement, reduction, replacement*. New York: Marcel Dekker, Inc., 9-25.

Andersen ME, MacNaughton MG, Clewell HJ, et al. 1987. Adjusting exposure limits for long and short exposure periods using a physiological pharmacokinetic model. *Am Ind Hyg Assoc J* 48(4):335-343.

Andersson K, Fuxe K, Nilsen OG, et al. 1981. Production of discrete changes in dopamine and noradrenaline levels and turnover in various parts of the rat brain following exposure to xylene, *ortho*-, *meta*-, and *para*-xylene, and ethylbenzene. *Toxicol Appl Pharmacol* 60:535-548.

Aneja VP. 1993. Organic compounds in cloud water and their deposition at a remote continental site. *J Air Waste Manage Assoc* 43:1239-1244.

Angerer J, Lehnert G. 1979. Occupational chronic exposure to organic solvents. *Int Arch Occup Environ Health* 43:145-150.

Angerer J, Wulf H. 1985. Occupational chronic exposure to organic solvents. XI. Alkylbenzene exposure of varnish workers: Effects on hematopoietic system. *Int Arch Occup Environ Health* 56:307-321.

Anid PJ, Alvarez PJJ, Vogel TM. 1993. Biodegradations of monoaromatic hydrocarbons in aquifer columns amended with hydrogen peroxide and nitrate. *Wat Res* 27(4):685-691.

Antoine SR, DeLeon IR, O'Dell-Smith RM. 1986. Environmentally significant volatile organic pollutants in human blood. *Bull Environ Contam Toxicol* 36:364-371.

APHA. 1995a. Method 6040 B. Closed-loop stripping, gas chromatography/mass spectrometric analysis. In: Eaton AD, Clesceri LS, Greenberg AE, eds. *Standard methods for the examination of water and wastewater*. Washington, DC: American Public Health Association. American Water Works Association. Water Environmental Federation, 6-7 to 6-16.

APHA. 1995b. Method 6210 B. Purge and trap packed-column gas chromatographic/mass spectrometric method I. In: Eaton AD, Clesceri LS, Greenberg AE, eds. *Standard methods for the examination of water and wastewater*. Washington, DC: American Public Health Association. American Water Works Association. Water Environmental Federation, 6-17 to 6-25.

APHA. 1995c. Method 6220 B. Purge and trap gas chromatographic method I. In: Eaton AD, Clesceri LS, Greenberg AE, eds. *Standard methods for the examination of water and wastewater*. Washington, DC: American Public Health Association. American Water Works Association. Water Environmental Federation, 6-39 to 6-41.

## 9. REFERENCES

- APHA. 1995d. Method 6220 C. Purge and trap gas chromatographic method II. In: Eaton AD, Clesceri LS, Greenberg AE, eds. Standard methods for the examination of water and wastewater. Washington, DC: American Public Health Association. American Water Works Association. Water Environmental Federation, 6-42 to 6-46.
- Ashley DL, Prah JD. 1997. Time dependence of blood concentrations during and after exposure to a mixture of volatile organic compounds. *Arch Environ Health* 52(1):26-33.
- Ashley DL, Bonin MA, Cardinali FL. 1992. Determining volatile organic compounds in human blood from a large sample production by using purge and trap gas chromatography-mass spectrometry. *Anal Chem* 64(9):1021-1029.
- Ashley DL, Bonin MA, Cardinali FL, et al. 1994. Blood concentration of volatile organic compounds in a nonoccupationally exposed U.S. population and in groups with suspected exposure. *Clin Chem* 40(7):1401-1409.
- Ashley DL, Bonin MA, Hamar B, et al. 1995. Removing the smoking confounder from blood volatile organic compounds measurements. *Environ Res* 7(1):39-45.
- Assmuth T, Kalevi K. 1992. Concentrations and toxicological significance of trace organic compounds in municipal solid waste landfill gas. *Chemosphere* 24(9):1207-1216.
- ASTER. 1995. ASTER (Assessment Tools for the Evaluation of Risk) ecotoxicity profile. Duluth, MN: U.S. Environmental Protection Agency, Environmental Research Laboratory.
- ASTM. 1999a. D 2908-91. Standard practice for measuring volatile organic matter in water by aqueous-injection gas chromatography. In: Allen RF, Baldini NC, Donofrio et al., eds. 1999 Annual book of ASTM standards. Vol. 11.02. Section 11: Water and environmental technology, 168-173.
- ASTM. 1999b. D 3871-84. Standard test method for purgeable organic compounds in water using headspace sampling. In: Allen RF, Baldini NC, Donofrio PE, et al., eds. 1999 Annual book of ASTM standards. Vol. 11.02. Section 11: Water and environmental technology, 348-358.
- Atkinson R, Carter WPL. 1984. Kinetics and mechanisms of the gas-phase reactions of ozone with organic compounds under atmospheric conditions. *Chem Rev* 84:437-470.
- Atkinson R, Aschmann SM, Winer AM. 1987. Kinetics of the reactions of NO<sub>3</sub> radicals with a series of aromatic compounds. *Environ Sci Technol* 21:1123-1126.
- Atkinson R, Darnall KR, Pitts JN. 1978. Rate constraints for reaction of OH radicals and ozone with cresols at 300±1 K. *J Phys Chem* 82:2759-2761.
- Backer LC, Egeland GM, Ashley DL, et al. 1997. Exposure to regular gasoline and ethanol oxyfuel during refueling in Alaska. *Environ Health Perspect* 105(8):850-855.
- \*Backes WL, Sequeira DJ, Cawley GF, et al. 1993. Relationship between hydrocarbon structure and induction of P450: Effects on protein levels and enzyme activities. *Xenobiotica* 23(12):1353-1366.
- Bakke OM, Scheline RR. 1970. Hydroxylation of aromatic hydrocarbons in the rat. *Toxicol Appl Pharmacol* 16:691-700.

## 9. REFERENCES

- Bardodej Z, Bardodejova E. 1970. Biotransformation of ethylbenzene, styrene, and alpha-methylstyrene in man. *Am Ind Hyg Assoc J* 31:206-209.
- Bardodej Z, Cirek A. 1988. Long-term study on workers occupationally exposed to ethylbenzene. *J Hyg Epidemiol Microbiol Immunol* 32:1-5.
- Barker JF. 1987. Volatile aromatic and chlorinated organic contaminants in groundwater at six Ontario landfills. *Water Pollut Res J Can* 22:33-48.
- Barnes DG, Dourson M. 1988. Reference dose (RfD): Description and use in health risk assessments. U.S. Environmental Protection Agency. *Regul Toxicol Pharmacol* 8:471-486.
- Barnett JF. 2006. Oral (gavage) subchronic neurotoxicity study of ethylbenzene in rats with recovery group. Arlington, VA: American Chemistry Council.
- Barrefors G, Petersson G. 1993. Assessment of ambient volatile hydrocarbons from tobacco smoke and from vehicle emissions. *J Chromatogr* 643(1/2):71-76.
- Baun A, Jensen SD, Bjerg PL, et al. 2000. Toxicity of organic chemical pollution in groundwater downgradient of a landfill (Grindsted, Denmark). *Environ Sci Technol* 34:1647-1652.
- Beavers JD, Himmelstein JS, Hammond SK, et al. 1996. Exposure in a household using gasoline-contaminated water: A pilot study. *J Occup Environ Med* 38(1):35-38.
- Bellar TA, Lichtenberg JJ. 1974. Determining volatile organics at microgram-per-liter levels by gas chromatography. *J Am Water Works Assoc* 66:739-744.
- Berger GS, ed. 1994. Epidemiology of endometriosis. In: *Endometriosis: Advanced management and surgical techniques*. New York, NY: Springer-Verlag, 3-7.
- Berkley RE, Varns JL, Pleil J. 1991. Comparison of portable gas chromatographs and passivated canisters for field sampling airborne toxic organic vapors in the United States and the USSR. *Environ Sci Technol* 25(8):1439-1444.
- \*Bernard AM, De Russis R, Normand J-C, et al. 1989. Evaluation of the subacute nephrotoxicity of cyclohexane and other industrial solvents in the female Sprague-Dawley rat. *Toxicol Lett* 45(2/3):271-280.
- Bestetti G, Galli E. 1984. Plasmid-coded degradation of ethylbenzene and 1-phenylethanol in *Pseudomonas fluorescens*. *FEMS Microbiology Letters* 21:165-168.
- \*Bevan MAJ, Proctor CJ, Baker-Rogers J. 1991. Exposure to carbon monoxide, respirable suspended particulates, and volatile organic compounds while commuting by bicycle. *Environ Sci Technol* 25(4):788-791.
- Biedermann M, Grob K, Morchio G. 1995. On the origin of benzene, toluene, ethylbenzene and xylene in extra virgin olive oil. *Z Lebensm Unters Forsch* 200:266-272.
- Blank IH, McAuliffe DJ. 1985. Penetration of benzene through human skin. *J Invest Dermatol* 84:522-526.

## 9. REFERENCES

- Blank IH, Scheuplein RJ. 1969. Transport into and within the skin. *Brit J Dermatol* 81(Supp 4):4-10.
- Bohon RL, Claussen WF. 1951. The solubility of aromatic hydrocarbons in water. *J Am Chem Soc* 73:1571-1578.
- Borden RC, Yanoschak TM. 1990. Ground and surface water quality impacts of North Carolina sanitary landfills. *Water Resour Bull* 26(2):269-277.
- Borden RC, Black DC, McBleif KV. 2002. MTBE and aromatic hydrocarbons in North Carolina stormwater runoff. *Environ Pollut* 118:141-152.
- Bouwer EJ, McCarty PL. 1983. Transformations of halogenated organic compounds under dinitrification conditions. *Appl Environ Microbiol* 45:1295-1299.
- Bouwer EJ, McCarty PL. 1984. Modeling of trace organics biotransformation in the subsurface. *Ground Water* 22:433-440.
- Boyd SA, Xiangcan J, Lee J-F. 1990. Sorption of nonionic organic compounds by corn residues from a no-tillage field. *J Environ Qual* 19:734-738.
- Bratveit M, Kirkeleit J, Hollund BE, et al. 2007. Biological monitoring of benzene exposure for process operators during ordinary activity in the upstream petroleum industry. *Ann Occup Hyg* 51(5):487-494.
- Brown HS, Hattis D. 1989. The role of skin absorption as a route of exposure for volatile organic compounds (VOCs) in household tap water: A simulated kinetic approach. *J Am Coll Toxicol* 8(5):839-851.
- Budavari S, O'Neil MJ. 1989. Ethylbenzene. In: *The Merck index. An encyclopedia of chemicals, drugs, and biologicals.* 11th ed. Rahway, NJ: Merck & Co., Inc., 595.
- Burback BL, Perry JJ. 1993. Biodegradation and biotransformation of groundwater pollutant mixtures by *Mycobacterium vaccae*. *Applied and Environmental Microbiology* 59(4):1025-1029.
- Burri J, Crockett R, Hany R, et al. 2004. Gasoline composition determined by <sup>1</sup>H NMR spectroscopy. *Fuel* 83(2):187-193.
- Burris DR, MacIntyre WG. 1984. Water solubility behavior of hydrocarbon mixtures implications for petroleum dissolution. In: Vandermeulen JH, Hrudey SE, eds. *Oil in freshwater: Chemistry, biology, countermeasure technology.* New York, NY: Pergamon Press, 85-93.
- C&EN. 1994a. Production by the U.S. chemical industry: Growth continues in chemical production. *Chem Eng News* 72(27):30-36.
- C&EN. 1994b. Top 50 chemicals production rose modestly last year. *Chem Eng News* 72(15):12-15.
- C&EN. 1995. Production soared in most chemical sectors. *Chem Eng News* 73(26):38-42.
- C&EN. 2006. Production: Growth is the norm. Output of chemicals increased across most products and in most countries. *Chem Eng News*. July 10, 2006.

## 9. REFERENCES

- Campbell JL, Fisher JW. 2007. A PBPK modeling assessment of the competitive metabolic interactions of JP-8 vapor with two constituents, m-xylene and ethylbenzene. *Inhal Toxicol* 19(3):265-273.
- Cannella WJ. 2007. Xylenes and ethylbenzene. Kirk-Othmer encyclopedia of chemical technology. <http://mrw.interscience.wiley.com/emrw/9780471238966/kirk/article/xylecann.a01/current/pdf>. February 18, 2010.
- Cappaert NLM, Klis SFL, Baretta AB, et al. 2000. Ethyl benzene-induced ototoxicity in rats: A dose-dependent mid-frequency hearing loss. *J Assoc Res Otolaryngol* 1(4):292-299.
- Cappaert NLM, Klis SFL, Muijsers H, et al. 1999. The ototoxic effects of ethyl benzene in rats. *Hear Res* 137:91-102.
- Cappaert NLM, Klis SFL, Muijsers H, et al. 2001. Simultaneous exposure to ethyl benzene and noise: Synergistic effects on outer hair cells. *Hear Res* 162(1-2):67-79.
- Cappaert NLM, Klis SFL, Muijsers H, et al. 2002. Differential susceptibility of rats and guinea pigs to the ototoxic effects of ethyl benzene. *Neurotoxicol Teratol* 24(4):503-510.
- Chakroun R, Faidi F, Hedhili A, et al. 2008. Inhalant abuse detection and evaluation in young Tunisians. *J Forensic Sci* 53(1):232-237.
- \*Chan C, Lin S, Her G. 1994. Office worker's exposure to volatile organic compounds while commuting and working in Taipei City. *Atmos Environ* 28(14):2351-2359.
- Charest-Tardif G, Tardif R, Krishnan K. 2006. Inhalation pharmacokinetics of ethylbenzene in B6C3F1 mice. *Toxicol Appl Pharmacol* 210(1-2):63-69.
- Chen C, Taylor RT. 1995. Thermophilic biodegradation of BTEX by two *Thermus* species. *Biotechnol Bioeng* 48:614-624.
- Chen CS, Zoltek J. 1995. Organic priority pollutants in wetland-treated leachates at a landfill in central Florida. *Chemosphere* 31(6):3455-3464.
- Chen CS, Hseu YC, Liang SH, et al. 2008. Assessment of genotoxicity of methyl-tert-butyl ether, benzene, toluene, ethylbenzene, and xylene to human lymphocytes using comet assay. *J Hazard Mater* 153(1-2):351-356.
- Chin BH, McKelvey JA, Calisti LJ, et al. 1980a. A comparison of *in vivo* and *in vitro* (tissue explant) techniques: Metabolic profile of ethylbenzene in the rat and the dog. *Bull Environ Contam Toxicol* 25:241-245.
- Chin BJ, McKelvey JA, Tyler TR, et al. 1980b. Absorption, distribution, and excretion of ethylbenzene, ethylcyclohexane, and methylethylbenzene isomers in rats. *Bull Environ Contam Toxicol* 24:477-483.
- Chiou CT, Porter PE, Schmedding DW. 1983. Partition equilibria of nonionic organic compounds between soil organic matter and water. *Environ Sci Technol* 17:227-231.
- Clay P. 2001. Ethylbenzene: In vivo mouse liver unscheduled DNA synthesis assay. Brussels, Belgium: CEFIC Styrene Steering Committee.

## 9. REFERENCES

- Clayton GD, Clayton FE, eds. 1981. *Patty's industrial hygiene and toxicology*. Vol. 2B. 3rd ed. New York, NY: John Wiley & Sons, Inc., 3303-3307.
- Clewell HJ, Andersen M. 1985. Risk assessment extrapolations and physiological modeling. *Toxicol Ind Health* 1(4):111-131.
- Climie IJG, Hutson DH, Stoydin G. 1983. The metabolism of ethylbenzene hydroperoxide in the rat. *Xenobiotica* 13:611-618.
- CMR. 2004. Ethylbenzene. *Chemical Market Reporter*. Jun 14, 2007.
- Cole RH, Frederick RE, Healy RP, et al. 1984. Preliminary findings of the priority pollutant monitoring project of the nationwide urban runoff program. *J Water Pollut Control Fed* 56:898-908.
- Cometto-Muñiz JE, Cain WS. 1995. Relative sensitivity of the ocular trigeminal, nasal trigeminal and olfactory systems to airborne chemicals. *Chemical Senses* 20(2):191-198.
- Conkle JP, Camp BJ, Welch BE. 1975. Trace composition of human respiratory gas. *Arch Environ Health* 30:290-295.
- Cotruvo JA. 1985. Organic micropollutants in drinking water: An overview. *Sci Total Environ* 47:7-26.
- Cragg ST, Clarke EA, Daly IW, et al. 1989. Subchronic inhalation toxicity of ethylbenzene in mice, rats, and rabbits. *Fundam Appl Toxicol* 13(3):399-408.
- Cramer PH, Boggess KE, Hosenfeld JM, et al. 1988. Determination of organic chemicals in human whole blood: Preliminary method development for volatile organics. *Bull Environ Contam Toxicol* 40:612-618.
- Daisey JM, Hodgson AT, Fisk WJ, et al. 1994. Volatile organic compounds in twelve California office buildings: Classes, concentrations and sources. *Atmos Environ* 28(22):3557-3562.
- Dawson JJC, Iroegbu CO, Maciel H, et al. 2008. Application of luminescent biosensors for monitoring the degradation and toxicity of BTEX compounds in soils. *J Appl Microbiol* 104(1):141-151.
- Dean BJ, Brooks TM, Hodson-Walker G, et al. 1985. Genetic toxicology testing of 41 industrial chemicals. *Mutat Res* 153:57-77.
- De Ceaurriz JC, Micillino JC, Bonnet P, et al. 1981. Sensory irritation caused by various industrial airborne chemicals. *Toxicol Lett (Amst)* 9:137-144.
- Degirmenci E, Ono Y, Kawara O, et al. 2000. Genotoxicity analysis and hazardousness prioritization of a group of chemicals. *Water Sci Technol* 42(7-8):125-131.
- de Medinilla J, Espirgares M. 1988. Contamination by organic solvents in auto paint shops. *Am Occup Hyg* 31(4):509-513.
- Dennison JE, Andersen ME, Clewell HJ, et al. 2004. Development of a physiologically based pharmacokinetic model for volatile fractions of gasoline using chemical lumping analysis. *Environ Sci Technol* 38(21):5674-5681.

## 9. REFERENCES

- Dennison JE, Andersen ME, Yang RSH. 2003. Characterization of the pharmacokinetics of gasoline using PBPK modeling with a complex mixtures chemical lumping approach. *Inhal Toxicol* 15:961-986.
- Dennison JE, Bigelow PL, Mumtaz MM, et al. 2005. Evaluation of potential toxicity from co-exposure to three CNS depressants (toluene, ethylbenzene, and xylene) under resting and working conditions using PBPK modeling. *J Occup Environ Hyg* 2(3):127-135.
- Dewulf J, Dewettinck T, De Visscher A, et al. 1996. Sorption of chlorinated C<sub>1</sub>- and C<sub>2</sub>-hydrocarbons and monocyclic aromatic hydrocarbons on sea sediment. *Water Research* 30 (12):3130-3138.
- Dilling WL, Bredeweg CJ, Tefertiller NB. 1976. Organic photochemistry. XIII. Simulated atmospheric photodecomposition rates of methylene chloride, 1,1,1-trichloroethane, trichloroethylene, tetrachloroethylene, and other compounds. *Environ Sci Technol* 10:351-356.
- Dodson RE, Levy JI, Spengler JD, et al. 2008. Influence of basements, garages, and common hallways on indoor residential volatile organic compound concentrations. *Atmos Environ* 42(7):1569-1581.
- Dreisch FA, Munson TO. 1983. Purge-and-trap analysis using fused silica capillary column GC/MS. *J Chromatogr Sci* 21:111-118.
- Driscoll N, Atwood ES. 1993. Application of gas chromatography with photoionization and electron-capture detectors for field screening of semi volatiles in soil and water. *J Chromatogr* 642:435-443.
- Dutkiewicz T, Tyras H. 1967. A study of the skin absorption of ethylbenzene in man. *Brit J Ind Med* 24:330-332.
- Dutkiewicz T, Tyras H. 1968. Skin absorption of toluene, styrene, and xylene by man. *Brit J Ind Med* 24:243.
- Ehret-Henry J, Ducruet V, Luciani A, et al. 1994. Styrene and ethylbenzene migration from polystyrene into dairy products by dynamic purge-and-trap gas chromatography. *J Food Sci* 59(5):990-1001.
- Ehrhardt M, Petrick G. 1984. On the sensitized photo-oxidation of alkylbenzenes in seawater. *Mar Chem* 15:47-58.
- Eiceman GA, McConnon JT, Zaman M, et al. 1986. Hydrocarbons and aromatic hydrocarbons in groundwater surrounding an earthen waste disposal pit for produced water in the Duncan oil field of New Mexico. *Int J Environ Anal Chem* 24:143-162.
- Eisenreich SJ, Looney BB, Thornton JD. 1981. Airborne organic contaminants in the Great Lakes ecosystem. *Environ Sci Technol* 15(1):30-38.
- Ellenson WD, Mukerjee S, Stevens RK, et al. 1997. An environmental scoping study in the lower Rio Grande Valley of Texas: II. Assessment of transboundary pollution transport and other activities by air quality monitoring. *Environ Int* 23(5):643-655.
- El Masri AM, Smith JN, Williams RT. 1958. The metabolism of alkylbenzenes: Phenylacetylene and phenylethylene (styrene). *Biochem J* 68(2):199-204.
- El Masry AM, Smith JN, Williams RT. 1956. The metabolism of alkylbenzenes: *n*-Propylbenzene and *n*-butylbenzene with further observations on ethylbenzene. *Biochem J* 64:50-56.



## 9. REFERENCES

- Elovaara E, Engstrom K, Nickels J, et al. 1985. Biochemical and morphological effects of long-term inhalation exposure of rats to ethylbenzene. *Xenobiotica* 15:299-308.
- Elovaara E, Engstrom K, Vainio H, et al. 1982. Unaltered metabolism of *m*-xylene in the presence of ethylbenzene. In: Hietanen E, Laitinen M, Hanninen O, eds. *Cytochrome P-450, biochemistry, biophysics and environmental implications*. Amsterdam, The Netherlands: Elsevier Biomedical Press, 765-768.
- Elovaara E, Engstrom K, Vainio H. 1984. Metabolism and disposition of simultaneously inhaled *m*-xylene and ethylbenzene in the rat. *Toxicol Appl Pharmacol* 75:466-478.
- Engelke M, Bergmann U, Diehl HA. 1993. Fluidity of the microsomal membrane and cytochrome P450 reduction kinetics of pig liver microsomes as a consequence of organic solvent impact. *Xenobiotica* 23(1):71-78.
- Engstrom J, Bjurstrom R. 1978. Exposure to xylene and ethylbenzene. II. Concentration in subcutaneous adipose tissue. *Scand J Work Environ Health* 4:195-203.
- Engstrom K, Elovaara E, Aitio A. 1985. Metabolism of ethylbenzene in the rat during long-term intermittent inhalation exposure. *Xenobiotica* 15:281-286.
- Engstrom K, Riihimaki V, Laine A. 1984. Urinary disposition of ethylbenzene and *m*-xylene in man following separate and combined exposure. *Int Arch Occup Environ Health* 54:355-363.
- \*Engstrom KM. 1984. Metabolism of inhaled ethylbenzene in rats. *Scand J Work Environ Health* 10:83-87.
- EPA. 1981. *Engineering handbook for hazardous waste incineration*. Cincinnati, OH: U.S. Environmental Protection Agency, Office of Solid Waste. PB81248163.
- EPA. 1982. *Aquatic fate process data for organic priority pollutants*. Washington, DC: U.S. Environmental Protection Agency, Office of Water Regulations and Standards, Monitoring and Data Support Division. EPA440481014.
- \*EPA. 1984a. *Application for permit to discharge wastewater: Existing manufacturing, commercial, mining, and silvicultural operations*. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 125.
- EPA. 1984b. *Health effects assessment for ethylbenzene*. Cincinnati, OH: U.S. Environmental Protection Agency, Environmental Criteria and Assessment Office. EPA540186008.
- EPA. 1984c. *Method 602: Purgeable aromatics. Guidelines establishing test procedures for the analysis of pollutants under the Clean Water Act; final rule and interim final rule and proposed rule*. U.S. Environmental Protection Agency. *Fed Regist* 49(209):40-48.
- \*EPA. 1984d. *Method 624. Guidelines establishing test procedures for the analysis of pollutants under the Clean Water Act; final rule and interim final rule and proposed rule*. U.S. Environmental Protection Agency. 40 CFR Part 136.

## 9. REFERENCES

- EPA. 1984e. Analyses of exhaled breath of 355 urban residents for volatile organic compounds. Indoor Air. Vol. 4. Chemical characterization and personal exposure. Proceedings of the 3<sup>rd</sup> International Conference on Indoor Air Quality and Climate held in Stockholm on August 20-24, 1984. U.S. Environmental Protection Agency. PB85104214, 15-20.
- EPA. 1986. Broad scan analysis of the FY82 national human adipose tissue survey specimens. Vol. I. Executive summary. Washington, DC: U.S. Environmental Protection Agency, Office of Toxic Substances. EPA566586035.
- EPA. 1987. Project summary. The total exposure assessment methodology (TEAM) study: Summary and analysis. U.S. Environmental Protection Agency, Office of Research and Development. EPA600687002.
- EPA. 1988a. Method T01-1. Method for the determination of volatile organic compounds in ambient air using tenax adsorption and gas chromatography mass spectrometry (GC/MS). Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. U.S. Environmental Protection Agency. EPA600489017.
- EPA. 1988b. Method T014-1. Determination of volatile organic compounds (VOCs) in ambient air using SUMMA passivated canister sampling and gas chromatographic analysis. Compendium of Methods for the determination of toxic organic compounds in ambient air. U.S. Environmental Protection Agency. EPA600489017.
- EPA. 1988c. National ambient volatile organic compounds (VOCs) data base update. Research Triangle Park, NC: U.S. Environmental Protection Agency, Atmospheric Sciences Research Laboratory. EPA600388010A.
- EPA. 1990a. Interim methods for development of inhalation reference concentrations. Washington, DC: U.S. Environmental Protection Agency, Office of Health and Environmental Assessment, Office of Research and Development, Environmental Criteria and Assessment Office. EPA600890066A. PB90238890.
- \*EPA. 1990b. Standards of performance for volatile organic compounds (VOC) emissions from synthetic organic chemical manufacturing industry (SOCMI) distillation operation. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 60.667.
- EPA. 1991a. Method 502.2. Volatile organic compounds in water by purge and trap capillary column gas chromatography with photoionization and electrolytic conductivity detectors in series. Methods for the determination of organic compounds in drinking water. U.S. Environmental Protection Agency. EPA600488039.
- EPA. 1991b. Method 503.1. Volatile aromatic and unsaturated organic compounds in water by purge and trap gas chromatography. Methods for the determination of organic compounds in drinking water. U.S. Environmental Protection Agency. EPA600488039.
- EPA. 1991c. Method 524.1. Measurement of purgeable organic compounds in water by packed column gas chromatography/mass spectrometry. Revision 3.0. In: Methods for the determination of organic compounds in drinking water. Cincinnati, OH: U.S. Environmental Protection Agency, 253-282. EPA600488039. PB91231480.

## 9. REFERENCES

- EPA. 1991d. Alpha<sub>20</sub>-Globulin: Association with chemically induced renal toxicity and neoplasia in the male rat. Washington, DC: U.S. Environmental Protection Agency. EPA625391019F.
- EPA. 1992a. Method 524.2. Measurement of purgeable organic compounds in water by capillary column gas chromatography mass spectrometry. Methods for the determination of organic compounds in drinking water. Supplement II. U.S. Environmental Protection Agency. EPA600R92129.
- \*EPA. 1992b. National air toxics information clearinghouse: NATICH data base report on state, local and EPA air toxics activities. Research Triangle Park, NC: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Emissions Standards Division. EPA453R92008.
- EPA. 1992c. Hazardous wastes from non-specific sources. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 261.31.
- \*EPA. 1994a. National emissions standards for organic hazardous air pollutants from synthetic organic chemical manufacturing industry. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 63.106.
- EPA. 1994c. Measurement of reformulated gasoline fuel parameters. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 80.46.
- EPA. 1994d. Method 8021A. Halogenated volatiles by gas chromatography using photoionization and electrolytic conductivity detectors in series: Capillary column technique. SW-846. Final update II. 3rd ed. U.S. Environmental Protection Agency.
- EPA. 1994e. Method 8260A. Volatile organic compounds by gas chromatography mass spectrometry (GC/MS): Capillary column technique. Method Status Table SW-846, 3rd ed., Updates I, II, IIA and IIB. U.S. Environmental Protection Agency.
- EPA. 1995a. Method 8021B. Halogenated volatiles by gas chromatography using photoionization and electrolytic conductivity detectors in series: Capillary column technique. SW-846. Final update IIB. 3rd ed. U.S. Environmental Protection Agency.
- EPA. 1995b. Method 8260B. Volatile organic compounds by gas chromatography mass spectrometry (GC/MS): Capillary column technique. SW-846. Final update IIB. 3rd ed. U.S. Environmental Protection Agency.
- EPA. 1995c. Drinking water regulations and health advisories. Washington, DC: U.S. Environmental Protection Agency, Office of Water.
- EPA. 1995d. Toxic chemical release inventory. Reporting form R and instructions. Section 313 of the Emergency Planning and Community Right-to-Know Act. Washington, DC: U.S. Environmental Protection Agency, Office of Pollution Prevention and Toxics.
- EPA. 1995e. Method 4030: Soil screening for petroleum hydrocarbons by immunoassay. In: Test methods for evaluating solid waste, physical/chemical methods. Final update IIB. 3rd ed. U.S. Environmental Protection Agency. SW-846. <http://www.epa.gov/epaoswer/hazwaste/test/pdfs/4030.pdf>. August 15, 2007.
- \*EPA. 1997a. Land disposal restrictions: Correction of tables; treatment standards for hazardous wastes and universal treatment standards. U.S. Environmental Protection Agency. Fed Regist 62:7502-7600.

## 9. REFERENCES

- EPA. 1997b. Special report on environmental endocrine disruption: An effects assessment and analysis. Washington, DC: U.S. Environmental Protection Agency, Risk Assessment Forum. EPA630R96012.
- EPA. 1999. Method 624: Purgeables. In: Methods and guidance for the analysis of water: Version 2. U.S. Environmental Protection Agency. PB99500209.  
[http://infotrek.er.usgs.gov/docs/nemi/method\\_pdf/5249.pdf](http://infotrek.er.usgs.gov/docs/nemi/method_pdf/5249.pdf). August 13, 2007.
- EPA. 2000. Benchmark dose technical guidance document. Washington, DC: U.S. Environmental Protection Agency. EPA630R00001.
- EPA. 2003. National primary drinking water regulations. Washington, DC: U.S. Environmental Protection Agency, Office of Ground Water and Drinking Water. EPA816F03016.  
<http://www.epa.gov/safewater/mcl.html>. March 07, 2006.
- EPA. 2004. Inert pesticide ingredients in pesticide products. Washington, DC: U.S. Environmental Protection Agency. <http://www.epa.gov/opprd001/inerts/lists.html>. April 11, 2007.
- EPA. 2005. Toxic chemical release inventory reporting forms and instructions: Revised 2004 version. Section 313 of the Emergency Planning and Community Right-to-Know Act (Title III of the Superfund Amendments and Reauthorization Act of 1986). U.S. Environmental Protection Agency. Office of Environmental Information. EPA260B05001.
- EPA. 2006a. Drinking water standards and health advisories. Washington, DC: Office of Water, U.S. Environmental Protection Agency. EPA822R04005. <http://epa.gov/waterscience/criteria/drinking/>. April 11, 2007.
- EPA. 2006b. National recommended water quality criteria. Washington, DC: U.S. Environmental Protection Agency, Office of Water, Office of Science and Technology.  
<http://www.epa.gov/waterscience/criteria/wqcriteria.html>. March 07, 2006.
- EPA. 2007a. Acute exposure guideline levels (AEGLs) Washington, DC: Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency.  
<http://www.epa.gov/oppt/aegl/pubs/compiled.pdf>. April 11, 2007.
- EPA. 2007b. Designated as hazardous substances in accordance with Section 311(b)(2)(A) of the Clean Water Act. Code of Federal Regulations. 40 CFR 116.4. Washington, DC: U.S. Environmental Protection Agency. <http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm>. April 11, 2007.
- EPA. 2007c. Hazardous air pollutants. Clean Air Act. United States Code. 42 USC 7412. Washington, DC: U.S. Environmental Protection Agency. <http://www.epa.gov/ttn/atw/orig189.html>. April 11, 2007.
- EPA. 2007d. Reportable quantities of hazardous substances designated pursuant to Section 311 of the Clean Water Act. Code of Federal Regulations. 40 CFR 117.3. Washington, DC: U.S. Environmental Protection Agency. <http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm>. April 11, 2007.
- EPA. 2007e. Superfund, emergency planning, and community right-to-know programs. Designation, reportable quantities, and notifications. Code of Federal Regulations. 40 CFR 302.4. Washington, DC: U.S. Environmental Protection Agency. <http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm>. April 11, 2007.

## 9. REFERENCES

- EPA. 2007f. Superfund, emergency planning, and community right-to-know programs. Toxic chemical release reporting. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 372.65. <http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm>. April 11, 2007.
- EPA. 2007g. Toxic pollutants designated pursuant to Section 307(a)(1) of the Clean Water Act. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 401.15. <http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm>. April 11, 2007.
- EPA. 2007h. Toxic Substances Control Act. Health and Safety Data Reporting. Substances and listed mixtures to which this subpart applies. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 716.120. <http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm>. April 11, 2007.
- EPA. 2007i. Ethylbenzene. Modernized STORET system: Regular results by project (stormodb): Characteristic search by CAS number. U.S. Environmental Protection Agency. <http://www.epa.gov/storet/dbtop.html>. April 02, 2007.
- EPA. 2007j. Master testing list. Washington, DC: U.S. Environmental Protection Agency, Office of Pollution Prevention and Toxics. <http://www.epa.gov/opptintr/chemtest/pubs/mtl.htm>. May 10, 2007.
- Ethylbenzene Producers Association. 1986a. A four day inhalation study of ethylbenzene in the rat, mouse, and rabbit. Ethylbenzene Producers Association. Submitted to the U.S. Environmental Protection Agency under TSCA Section 8D. OTS0513170.
- \*Ethylbenzene Producers Association. 1986b. A four week inhalation study of ethylbenzene in the rat, mouse, and rabbit. Ethylbenzene Producers Association. Submitted to the U.S. Environmental Protection Agency under TSCA Section 8d. OTS0513173.
- \*Etkina EI, Etkina IA. 1995. Chemical mixtures exposure and children's health. *Chemosphere* 31(1):2463-2474.
- Faber WD, Roberts LSG, Stump DG, et al. 2006. Two generation reproduction study of ethylbenzene by inhalation in Crl-CD rats. *Birth Defects Res B Dev Reprod Toxicol* 77(1):10-21.
- Faber WD, Roberts LSG, Stump DG, et al. 2007. Inhalation developmental neurotoxicity study of ethylbenzene in Crl-CD rats. *Birth Defects Res B Dev Reprod Toxicol* 80:34-48.
- FDA. 2006a. Beverages. Bottled water. U.S. Food and Drug Administration. Code of Federal Regulations. 21 CFR 165.110. <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm>. April 11, 2007.
- FDA. 2006b. Total diet study. Market baskets 1991-1993 through 2003-2004. U.S. Food and Drug Administration, 1-126.
- FDA. 2007. Everything added to food in the United States (EAFUS) Washington, DC: U.S. Food and Drug Administration. <http://vm.cfsan.fda.gov/~dms/eafus.html>. April 11, 2007.
- FEDRIP. 2007. Ethylbenzene. Federal Research in Progress database. Springfield, VA: National Technical Information Service.
- Fellin P, Otson R. 1994. Assessment of the influence of climatic factors on concentration levels of volatile organic compounds (VOCs) in Canadian homes. *Atmos Environ* 28(22):3581-3586.

## 9. REFERENCES

- Ferrario JB, Lawler GC, DeLeon IR, et al. 1985. Volatile organic pollutants in biota and sediments of Lake Pontchartrain. *Bull Environ Contam Toxicol* 34:246-255.
- Filipovic D, Paulsen MD, Loida PJ, et al. 1992. Ethylbenzene hydroxylation by cytochrome P450cam. *Biochem Biophys Res Commun* 189(1):488-495.
- Fishbein L. 1985. An overview of environmental and toxicological aspects of aromatic hydrocarbons. IV. Ethylbenzene. *Sci Total Environ* 44:269-287.
- Florin I, Rutberg L, Curvall M, et al. 1980. Screening of tobacco smoke constituents for mutagenicity using the Ames test. *Toxicology* 18:219-232.
- Fomon SJ. 1966. Body composition of the infant: Part 1: The male reference infant. In: Faulkner F, ed. *Human development*. Philadelphia, PA: WB Saunders, 239-246.
- Fomon SJ, Haschke F, Ziegler EE, et al. 1982. Body composition of reference children from birth to age 10 years. *Am J Clin Nutr* 35:1169-1175.
- \*Fouchecourt MO, Riviere JL. 1996. Activities of liver and lung cytochrome p450-dependent monooxygenases and antioxidant enzymes in laboratory and wild Norway rats exposed to reference and contaminated soils. *Toxicology* 30(4):513-522.
- Frantik E, Hornychova M, Horvath M. 1994. Relative acute neurotoxicity of solvents: Isoeffective air concentrations of 48 compounds evaluated in rats and mice. *Environ Res* 66(2):173-185.
- Freundt KJ, Romer KG, Federsel RJ. 1989. Decrease of inhaled toluene, ethyl benzene, m-xylene, or mesitylene in rat blood after combined exposure to ethyl acetate. *Bull Environ Contam Toxicol* 42:495-498.
- Fuciarelli AF. 2000. Ethylbenzene two-week repeated-dose inhalation toxicokinetic study report. Research Triangle Park, NC: National Institute of Environmental Health Services.
- Fukuda M, Nishi T, Igarashi M, et al. 1989. Degradation of ethylbenzene by *Pseudomonas putida* harboring OCT plasmid. *Agric Biol Chem* 53(12):3293-3299.
- Fustinoni S, Buratti M, Giampiccolo R. 1995. Biological and environmental monitoring of exposure to airborne benzene and other aromatic hydrocarbons in Milan traffic wardens. *Toxicol Lett* 77:387-392.
- Fustinoni S, Buratti M, Giampiccolo R, et al. 1996. Biological monitoring of airborne aromatic hydrocarbon exposure: A gas chromatographic procedure for the determination of benzene, toluene, ethylbenzene and xylenes in blood and urine. *Med Lav* 87(1):63-75.
- Gagnaire F, Langlais C. 2005. Relative ototoxicity of 21 aromatic solvents. *Arch Toxicol* 79(6):346-354.
- Gagnaire F, Langlais C, Grossmann S, et al. 2007. Ototoxicity in rats exposed to ethylbenzene and to two technical xylene vapours for 13 weeks. *Arch Toxicol* 81(2):127-143.
- Gargas ML, Burgess RJ, Voisard DE, et al. 1989. Partition coefficients of low-molecular-weight volatile chemicals in various liquids and tissues. *Toxicol Appl Pharmacol* 98:87-99.

## 9. REFERENCES

- \*Gerarde HW, Linden NJ. 1956. Toxicological studies on hydrocarbons. II. A comparative study of the effect of benzene and certain mono-n-alkylbenzenes on hemopoiesis and bone marrow metabolism in rats. *AMA Arch Ind Health* 13:468-474.
- \*Gerarde HW, Linden NJ. 1963. Toxicological studies on hydrocarbons: IX. The aspiration hazard and toxicity of hydrocarbons and hydrocarbon mixtures. *Arch Environ Health* 6:329-341.
- \*Gershbein LL. 1975. Liver regeneration as influenced by the structure of aromatic and heterocyclic compounds. *Res Commun Chem Pathol Pharmacol* 11:445-466.
- Gibson DP, Brauning R, Shaffi HS, et al. 1997. Induction of micronuclei in Syrian hamster embryo cells: Comparison to results in the SHE cell transformation assay for national toxicology program test chemicals. *Mutat Res* 392(1-2):61-70.
- Gibson DT, Geschwendt B, Yeh WK, et al. 1973. Initial reactions in the oxidation of ethylbenzene by *Pseudomonas putida*. *Biochemistry* 12:1520-1528.
- Gillette JR, Mitchell JR, Brodie BB. 1974. Biochemical mechanisms of drug toxicity. *Ann Rev Pharmacol* 14:271-288.
- Giwercman A, Carlsen E, Keiding N, et al. 1993. Evidence for increasing incidence of abnormalities of the human testis: A review. *Environ Health Perspect Suppl* 101(2):65-71.
- Goldberg MS, Al-Homsi N, Goulet L, et al. 1995. Incidence of cancer among persons living near municipal solid waste landfill site in Montreal, Quebec. *Arch Environ Health* 50(6):416-424.
- Górna-Binkul A, Keymeulen R, Van Langenhove H, et al. 1996. Determination of monocyclic aromatic hydrocarbons in fruit and vegetables by gas chromatography-mass spectrometry. *J Chromatogr A* 734(2):297-302.
- Gossel TA, Bricker JD. 1994. Principles of clinical toxicology. 3rd ed. New York, NY: Raven Press, 124-126.
- Gramshaw JW, Vandenburg HJ. 1995. Compositional analysis of samples of thermoset polyester and migration of ethylbenzene and styrene from thermoset polyester into pork during cooking. *Food Addit Contam* 12(2):223-234.
- Greiner JW, Kramer RE, Robinson DA, et al. 1976. Interaction of aromatic hydrocarbons and drugs with adrenal microsomal cytochrome P-450 in the guinea pig. *Biochem Pharmacol* 25(8):951-955.
- Gromiec JP, Piotrowski JK. 1984. Urinary mandelic-acid as an exposure test for ethylbenzene. *Int Arch Occup Environ Health* 55(1):61-72.
- Grosjean D, Fung K. 1984. Hydrocarbons and carbonyls in Los Angeles air. *J Air Pollut Control Assoc* 34:537-543.
- Grovenstein E, Mosher AJ. 1970. Reaction of atomic oxygen with aromatic hydrocarbons [Letter]. *J Am Chem Soc* 92:3810-3812.

## 9. REFERENCES

- Gschwend PM, Zafirlou OC, Mantoura RFC, et al. 1982. Volatile organic compounds at a coastal site. 1. Seasonal variations. *Environ Sci Technol* 16:31-38.
- \*Gut IY, Terelius E, Frantik I, et al. 1993. Exposure to various benzene derivatives differently induces cytochromes P450 2B1 and P450 2E1 in rat liver. *Arch Toxicol* 67(4):237-243.
- Guy RH, Maibach HI. 1984. Correction factors for determining body exposure from forearm percutaneous absorption data. *J Appl Toxicol* 4(1):26-28.
- Guzelian PS, Henry CJ, Olin SS. 1992. Similarities and differences between children and adults: Implications for risk assessment. Washington, DC: International Life Sciences Institute Press.
- Haddad S, Béliveau M, Tardif R, et al. 2001. A PBPK modeling-based approach to account for interactions in the health risk assessment of chemical mixtures. *Toxicol Sci* 63:125-131.
- Haddad S, Charest-Tardif G, Tardif R, et al. 2000. Validation of a physiological modeling framework for simulating the toxicokinetics of chemicals in mixtures. *Toxicol Appl Pharmacol* 167:199-209.
- Haddad S, Tardif R, Charest-Tardif G, et al. 1999. Physiological modeling of the toxicokinetic interactions in a quaternary mixture of aromatic hydrocarbons. *Toxicol Appl Pharmacol* 161:249-257.
- Hajimiragha H, Ewers U, Brockhaus A, et al. 1989. Levels of benzene and other volatile aromatic compounds in the blood of non-smokers and smokers. *Int Arch Occup Environ Health* 61(8):513-518.
- Hallbourg RR, Delfino JJ, Miller WL. 1992. Organic priority pollutants in groundwater and surface water at three landfills in north central Florida. *Water Air Soil Pollut* 65:307-322.
- Hampton CV, Pierson WR, Schuetzle D, et al. 1983. Hydrocarbon gases emitted from vehicles on the road. 2. Determination of emission rates from diesel and spark-ignition vehicles. *Environ Sci Technol* 17:699-708.
- Hansch C, Leo A. 1979. Substituent constants for correlation analysis in chemistry and biology. New York, NY: John Wiley & Sons, 232.
- Hansch C, Leo A, Hoekman D. 1995. Exploring QSAR hydrophobic, electronic, and steric constants. Washington, DC: American Chemical Society, 43.
- \*Hansen LF, Nielsen GD. 1994. Sensory irritation effects of n-propanol and ethylbenzene after pretreatment with capsaicin or indomethacin. *Pharmacol Toxicol* 75(3-4):154-161.
- Hard GC. 2002. Significance of the renal effects of ethylbenzene in rodents for assessing human carcinogenic risk. *Toxicol Sci* 69:30-41.
- Hardin B, Bond G, Sikov M, et al. 1981. Testing of selected workplace chemicals for teratogenic potential. *Scand J Work Environ Health* 4:66-75.
- Harkov R, Kebbekus B, Bozzelli JW, et al. 1983. Measurement of selected volatile organic compounds at three locations in New Jersey during the summer season. *J Air Pollut Control Assoc* 33:1177-1183.



## 9. REFERENCES

- HazDat. 2007. Ethylbenzene. HazDat Database: ATSDR's Hazardous Substance Release and Health Effects Database. Atlanta, GA: Agency for Toxic Substances and Disease Registry. <http://www.atsdr.cdc.gov/hazdat.html>. April 02, 2007.
- Heikes DL, Jensen SR, Fleming-Jones ME. 1995. Purge and trap extraction with GC-MS determination of volatile organic compounds in table-ready foods. *J Agric Food Chem* 43:2869-2875.
- Herron JT, Huie RE. 1973. Rate constants for the reactions of atomic oxygen ( $O^3P$ ) with organic compounds in the gas phase. *J Phys Chem Ref Data* 2(3):467-518.
- Hiatt MH. 1981. Analysis of fish and sediment for volatile priority pollutants. *Anal Chem* 53:1541-1543.
- Hiatt MH. 1983. Determination of volatile organic compounds in fish samples by vacuum distillation and fused silica capillary gas chromatography-mass spectrometry. *Anal Chem* 55:506-516.
- Hodgson AT, Daisey JM, Grot RA. 1991. Sources and source strengths of volatile organic compounds in a new office building. *J Air Waste Manage Assoc* 41(11):1461-1468.
- Hodgson AT, Daisey JM, Mahanama KRR, et al. 1996. Use of volatile tracers to determine the contribution of environmental tobacco smoke to concentrations of volatile organic compounds in smoking environment. *Environ Int* 22(3):295-307.
- Hodgson AT, Garbesi K, Sextro RG, et al. 1992. Soil-gas contamination and entry volatile organic compounds into a house near a landfill. *J Air Waste Manage Assoc* 42(3):277-283.
- Hodson J, Williams NA. 1988. The estimation of the adsorption coefficient ( $K_{oc}$ ) for soils by high performance liquid chromatography. *Chemosphere* 17:67-77.
- Hoel DG, Davis DL, Miller AB, et al. 1992. Trends in cancer mortality in 15 industrialized countries, 1969-1986. *J Natl Cancer Inst* 84(5):313-320.
- Holz O, Scherer G, Brodtmeier S, et al. 1995. Determination of low level exposure to volatile aromatic hydrocarbons and genotoxic effects in workers at a styrene plant. *Environ Med* 52(6):420-428.
- Hoshino M, Akimoto H, Okuda M. 1978. Photochemical oxidation of benzene, toluene, and ethylbenzene initiated by hydroxyl radicals in the gas phase. *Bull Chem Soc Jpn* 51:718-724.
- HSDB. 2009. Ethylbenzene. Hazardous Substances Data Bank. National Library of Medicine. <http://toxnet.nlm.nih.gov>. March 3, 2009.
- Hutchins SR. 1991. Optimizing BTEX biodegradation under denitrifying conditions. *Environ Toxicol Chem* 10:1437-1448.
- Hutchins SR, Sewell GW, Kovacs DA, et al. 1991. Biodegradation of aromatic hydrocarbons by aquifer microorganisms under denitrifying conditions. *Environ Sci Technol* 25:68-76.
- IARC. 2006. Agents reviewed by the IARC Monographs. Volumes 1-96. Lyon, France: International Agency for Research on Cancer. <http://monographs.iarc.fr/ENG/Classification/index.php>. April 11, 2007.

## 9. REFERENCES

- \*Imaoka S, Funae Y. 1991. Induction of cytochrome P450 isozymes in rat liver by methyl n-alkyl ketones and n-alkylbenzenes. Effects of hydrophobicity of inducers on inducibility of cytochrome Biochem Pharmacol 450(42):143-150.
- IRIS. 2007. Ethylbenzene. Integrated Risk Information System. Washington, DC: U.S. Environmental Protection Agency. <http://www.epa.gov/iris/subst/index.html>. April 11, 2007.
- Ivanov SV. 1962. [Toxicology of ethylbenzene.] Tr Voronezh Gos Med Inst 47:80-82. (Russian).
- Jamison VW, Raymond RL, Hudson JO. 1970. Hydrocarbon cooxidation by *Nocardia corallina* strain V-49. Develop Ind Microbiol 12:99-105.
- Janasik B, Jakubowski M, Jalowiecki P. 2008. Excretion of unchanged volatile organic compounds (toluene, ethylbenzene, xylene and mesitylene) in urine as a result of experimental human volunteer exposure. Int Arch Occup Environ Health 81(4):443-449.
- Jang JY, Droz PO, Kim S. 2001. Biological monitoring of workers exposed to ethylbenzene and co-exposed to xylene. Int Arch Occup Environ Health 74:31-37.
- Jay K, Steiglitz L. 1995. Identification and quantification of volatile organic components in emissions of waste incineration plants. Chemosphere 30(7):1249-1260.
- Jin S, Fallgren PH, Bilgin AA, et al. 2007. Bioremediation of benzene, ethylbenzene, and xylenes in groundwater under iron-amended, sulfate-reducing conditions. Environ Toxicol Chem 26(2):249-253.
- Johanson CE. 1980. Permeability and vascularity of the developing brain: Cerebellum vs. cerebral cortex. Brain Res 190:3-16.
- \*Johanson G, Filser JG. 1992. Experimental data from closed chamber gas uptake studies in rodents suggest lower uptake rate of chemical than calculated from literature values on alveolar ventilation. Arch Toxicol 66(4):291-295.
- Jonsson A, Persson KA, Grigoriadis V. 1985. Measurements of some low molecular-weight oxygenated, aromatic, and chlorinated hydrocarbons in ambient air and in vehicle emissions. Environ Int 11:383-392.
- Junk GA, Ford CS. 1980. A review of organic emissions from selected combustion processes. Chemosphere 9:187-230.
- Kango RY, Quinn JG. 1989. Adsorption studies of xylenes and ethylbenzene on soil and humic acid by a purge and trap gas chromatographic method. Chemosphere 19(8/9):1269-1276.
- Karasek FW, Charbonneau GM, Reuel GJ, et al. 1987. Determination of organic compounds leached from municipal incinerator fly ash by water at different pH levels. Anal Chem 59:1027-1031.
- Katzman H, Libby WF. 1975. Hydrocarbon emissions from jet engines operated at simulated high altitude supersonic flight conditions. Atmos Environ 9:839-842.
- Kaubisch N, Daly JW, Jerina DM. 1972. Arene oxides as intermediate in the oxidative metabolism of aromatic compounds. Isomerization of methyl-substituted arene oxides. Biochemistry 11:3080-3088.

## 9. REFERENCES

- Kawai T, Mizunuma K, Yasugi T, et al. 1991. Urinary methylhippuric acid isomer levels after occupational exposure to a xylene mixture. *Int Arch Occup Environ Health* 63(1):69-75.
- Kawai T, Yasugi T, Mizunuma K, et al. 1992. Comparative evaluation of urinalysis and blood analysis as means of detecting exposure to organic solvents at low concentrations. *Int Arch Occup Environ Health* 64(4):223-234.
- Kawamura K, Kaplan IR. 1983. Organic compounds in the rainwater of Los Angeles. *Environ Sci Tech* 17:497-501.
- Keefe SH, Barber LB, Runkel RL, et al. 2004. Fate of volatile organic compounds in constructed wastewater treatment wetlands. *Environ Sci Technol* 38(7):2209-2216.
- Keith LH, Garrison AW, Allen FR, et al. 1976. Identification of organic compounds in drinking water from thirteen U.S. cities. In: *Identification and analysis of organic pollutants in water*. Ann Arbor, MI: Ann Arbor Science Publishers, Inc., 329-373.
- Kelly TJ, Mukund R, Spicer CW, et al. 1994. Concentrations and transformations of hazardous air pollutants. *Environ Sci Technol* 28(8):378A-387A.
- Kerckaert GA, Brauning R, LeBoeuf RA, et al. 1996. Use of the syrian hamster embryo cell transformation assay for carcinogenicity prediction of chemicals currently being tested by the national toxicology program in rodent bioassays. *Environ Health Perspect* 104(supp 5):1075-1084.
- Keymeulen R, Van Langenhove H, Schamp N. 1991. Determination of monocyclic aromatic hydrocarbons in plant cuticles by gas chromatography-mass spectrometry. *J Chromatogr* 541:83-88.
- Kiese M, Lenk W. 1974. Hydroxyacetophenones: Urinary metabolites of ethylbenzene and acetophenone. *Xenobiotica* 4:337-343.
- Kinlin TE, Muraldihara R, Pittet AO, et al. 1972. Volatile components of roasted filberts. *J Agric Food Chem* 20:1021.
- Kinney PL, Chillrud SN, Ramstrom S, et al. 2002. Exposures to multiple air toxics in New York City. *Environ Health Perspect* 110(Suppl 4):539-546.
- Kirschner EM. 1995. Production of top 50 chemicals increased substantially in 1994. *Chem Eng News* 73(15):16-22.
- Kitto AM, Pirbazari M, Badriyha BN, Ravindran V, Tyner R, Synolakis CE. 1997. Emissions of volatile and semi-volatile organic compounds and particulate matter from hot asphalts. *Environ Technol* 18(2):121-138.
- Knecht U, Reske A, Weitowitz H. 2000. Biological monitoring of standardized exposure to ethylbenzene: Evaluation of a biological tolerance (BAT) value. *Arch Toxicol* 73:632-640.
- Knox RC, Canter LW. 1996. Prioritization of ground water contaminants and sources. *Water Air Soil Pollut* 88:205-226.
- Komori M, Nishio K, Kitada M et al. 1990. Fetus-specific expression of a form of cytochrome P-450 in human livers. *Biochemistry* 29:4430-4433.

## 9. REFERENCES

- Kos G, Ariya PA. 2006. Determination of a wide range of volatile and semivolatile organic compounds in snow by use of solid-phase micro-extraction (SPME). *Anal Bioanal Chem* 385:57-66.
- Kostiainen R. 1995. Volatile organic compounds in the indoor air of normal and sick houses. *Atmos Environ* 29(6):693-702.
- Krill RM, Sonzogni WC. 1986. Chemical monitoring of Wisconsin's groundwater. *J Am Water Works Assoc* 78:70-75.
- Krishnan K, Andersen ME. 1994. Physiologically-based pharmacokinetic modeling in toxicology. In: Wallace Hayes, ed. *Principles and Methods of Toxicology*. 3rd ed. New York, NY: Raven Press, Ltd., 149-188.
- Krishnan K, Andersen ME, Clewell HJ, et al. 1994. Physiologically based pharmacokinetic modeling of chemical mixtures. In: Yang RSH, ed. *Toxicology of chemical mixtures: Case studies, mechanisms, and novel approaches*. San Diego, CA: Academic Press, 399-437.
- Kubo T, Urano K, Utsumi H. 2002. Mutagenicity characteristics of 255 environmental chemicals. *J Health Sci* 48(6):545-554.
- Kwok ESC, Atkinson R. 1994. Estimation of hydroxyl radical reaction rate constants for gas-phase organic compounds using a structure-reactivity relationship: An update. Riverside CA: University of California. CMAARC8.00R.
- Ladefoged O, Lam HR, Ostergaard G, et al. 1998. Toxicity of the styrene metabolite, phenylglyoxylic acid, in rats after three months of oral dosing. *Neurotoxicology* 19(4-5):721-738.
- Lawryk NJ, Weisel CP. 1996. Concentration of volatile organic compounds in the passenger compartments of automobiles. *Environ Sci Technol* 30:810-816.
- Lawryk NJ, Liroy PJ, Weisel CP. 1995. Exposure to volatile organic compounds in the passenger compartment of automobiles during periods of normal and malfunctioning operation. *J Expo Anal Environ Epidemiol* 5(4):511-531.
- Leeder JS, Kearns GL. 1997. Pharmacogenetics in pediatrics: Implications for practice. *Pediatr Clin North Am* 44(1):55-77.
- Leikin JB, Poloucek FP. 2002. Ethylbenzene. In: *Poisoning and toxicology handbook*. Hudson, OH: Lexi-Comp, Inc., 554.
- Lesage S. 1993. Methods for the analysis of hazardous wastes. *J Chromatogr* 642:65-74.
- Leung HW. 1993. Physiologically-based pharmacokinetic modelling. In: Ballantine B, Marro T, Turner T, eds. *General and Applied Toxicology*. Vol. 1. New York, NY: Stockton Press, 153-164.
- Lide DR, ed. 1994. *CRC handbook of chemistry and physics*. 75th ed. Boca Raton, FL: CRC Press, Inc., 3-47, 6-62, 15-46, 16-26.
- Ligocki MP, Leuenberger C, Pankow JF. 1985. Trace organic compounds in rain-II. Gas scavenging of neutral organic compounds. *Atmos Environ* 19:1609-1617.

## 9. REFERENCES

- Lillo RS, Morris JW, Caldwell JM, et al. 1990. Atmosphere contamination following repainting of a human hyperbaric chamber complex. *Undersea Biomed Res* 17(5):437-449.
- Livingston AL. 1978. Forage plant estrogens. *J Toxicol Environ Health* 4(2-3):301-324.
- \*Lofgren L, Persson K, Stromvall A-M. 1991. Exposure of commuters to volatile aromatic hydrocarbons from petrol exhaust. *Sci Total Environ* 108(3):225-233.
- Lovegren NV, Fisher GS, Legendre MG, et al. 1979. Volatile constituents of dried legumes. *J Agric Food Chem* 27:851-853.
- Lyman WJ, Reehl WF, Rosenblatt DH. 1982. Handbook of chemical property estimation methods. New York, NY: McGraw-Hill Book Company, 15-25.
- Mackay D. 1979. Finding fugacity feasible. *Environ Sci Technol* 13(10):1218-1223.
- Mackay D, Shiu WY. 1981. A critical review of Henry's law constants for chemicals of environmental interest. *J Phys Chem Ref Data* 19:1175-1199.
- Mackay D, Shiu WY, Sutherland RP. 1979. Determination of air-water Henry's law constants for hydrophobic pollutants. *Environ Sci Technol* 13:333-337.
- Maltoni C, Ciliberti A, Pinto C, et al. 1997. Results of long-term experimental carcinogenicity studies of the effects of gasoline, correlated fuels, and major gasoline aromatics on rats. *Ann N Y Acad Sci* 837:15-52.
- Maltoni C, Conti B, Cotti G, et al. 1985. Experimental studies on benzene carcinogenicity at the Bologna Institute of Oncology: Current results and ongoing research. *Am J Ind Med* 7:415-446.
- Martin P, Heavner DL, Nelson PR, et al. 1997. Environmental tobacco smoke (ets): A market cigarette study. *Environ Int* 23(1):75-90.
- Masten LW, Boeri RL, Walker JD. 1994. Strategies employed to determine the acute aquatic toxicity of Ethylbenzene, a highly volatile, poorly water-soluble chemical. *Ecotoxicol Environ Safety* 27:335-348.
- Matsumoto T, Koga M, Sata T, et al. 1992. The changes of gasoline compounds in blood in a case of gasoline intoxication. *J Toxicol Clin Toxicol* 30(4):653-662.
- Maylin GA, Cooper MJ, Anders MW. 1973. Effect of phenobarbital treatment on the stereochemistry of the *in vitro* metabolism of ethylbenzene. *J Med Chem* 16:606-610.
- Mayr U, Butsch A, Schneider S. 1992. Validation of two *in vitro* test systems for estrogenic activities with zearalenone, phytoestrogens and cereal extracts. *Toxicology* 74(2-3):135-149.
- McClenny WA, Fortune CR. 1995. Superfund contract laboratory program method evaluation--ambient air volatile organic compounds from canisters. *J Environ Sci Health A* 30(4):901-919.
- McDougal JN, Pollard DL, Weisman W, et al. 2000. Assessment of skin absorption and penetration of JP-8 jet fuel and its components. *Toxicol Sci* 55:247-255.

## 9. REFERENCES

- McGregor DB, Brown A, Cattanaach P, et al. 1988. Responses of the L5178Y tk+/tk- mouse lymphoma cell forward mutation assay: III. 72 Coded chemicals. *Environ Mol Mutag* 12:85-154.
- McMahon RE, Sullivan HR. 1966. Microsomal hydroxylation of ethylbenzene. Stereospecificity and the effect. *Life Sci* 5:921-926.
- McMahon RE, Sullivan HR, Craig JC, et al. 1969. The microsomal oxygenation of ethylbenzene: Isotopic, stereochemical, and induction studies. *Arch Biochem Biophys* 132:575-577.
- Mellert W, Deckhardt K, Kaufmann W, et al. 2007. Ethylbenzene: 4- and 13-week rat oral toxicity. *Arch Toxicol* 81:361-370.
- Meylan WM, Howard PH, Boethling RS, et al. 1999. Improved method for estimating bioconcentration/bioaccumulation factor from octanol/water partition coefficient. *Environ Toxicol Chem* 18(4):664-672.
- Michael LC, Erickson MD, Parks SP. 1980. Volatile environmental pollutants in biological matrices with a headspace purge technique. *Anal Chem* 52:1836-1841.
- \*Mickiewicz W, Rzeczycki W. 1988. Effect of styrene and other alkyl benzene derivatives on oxidation of FAD- and NAD-linked substrates in rat liver mitochondria. *Biochem Pharmacol* 37(23):4439-4444.
- Midorikawa K, Uchida T, Okamoto Y, et al. 2004. Metabolic activation of carcinogenic ethylbenzene leads to oxidative DNA damage. *Chem Biol Interact* 150:271-281.
- Minnich MM, Zimmerman JH, Schumacher BA. 1997. Long-term study of volatile organic compound recovery from amputated, dry, fortified soils. *J Environ Qual* 26(1):108-114.
- Mohtashamipur E, Norpoth K, Woelke U, et al. 1985. Effects of ethylbenzene, toluene, and xylene on the induction of micronuclei in bone marrow polychromatic erythrocytes of mice. *Arch Toxicol* 58:106-109.
- Molnar J, Paksy KA, Naray M. 1986. Changes in the rat's motor behaviour during 4-hour inhalation exposure to preanesthetic concentrations of benzene and its derivatives. *Acta Physiol Hung* 67:349-354.
- Morgan DL, Cooper SW, Carlock DL, et al. 1991. Dermal absorption of neat and aqueous volatile organic chemicals in the Fischer 344 rat. *Environ Res* 55(1):51-63.
- Morselli PL, Franco-Morselli R, Bossi L. 1980. Clinical pharmacokinetics in newborns and infants: Age related differences and therapeutic implications. *Clin Pharmacokinet* 5:485-527.
- Moscato G, Biscaldi G, Cottica D, et al. 1987. Occupational asthma due to styrene: Two case reports. *J Occup Med* 29:957-960.
- Muhammad F, Monteiro-Riviere NA, Baynes RE, et al. 2005. Effect of *in vivo* jet fuel exposure on subsequent *in vitro* dermal absorption of individual aromatic and aliphatic hydrocarbon fuel constituents. *J Toxicol Environ Health* 68:719-737.
- Mukerjee S, Ellenson WD, Lewis RG, et al. 1997. An environmental scoping study in the Lower Rio Grande Valley of Texas: III. Residential microenvironmental monitoring for air, house dust, and soil. *Environ Int* 23(5):657-673.

## 9. REFERENCES

- Mukund R, Kelly TJ, Spicer CW. 1996. Source attribution of ambient air toxic and other VOCs in Columbus, Ohio. *Atmos Environ* 30(20):3457-3470.
- Mutti A, Falzoi H, Romanelli A, et al. 1988. Brain dopamine as a target for solvent toxicity: Effects of some monocyclic aromatic hydrocarbons. *Toxicology* 49:77-82.
- Nakajima T, Sato A. 1979. Enhanced activity of liver drug-metabolizing enzymes for aromatic and chlorinated hydrocarbons following food deprivation. *Toxicol Appl Pharmacol* 50:549-556.
- NAS. 1980. The alkyl benzenes. Washington, DC: National Academy of Sciences, I-16, IV-1 to IV-88.
- NAS/NRC. 1989. Report of the oversight committee. Biologic markers in reproductive toxicology. Washington, DC: National Academy of Sciences, National Research Council, National Academy Press, 15-35.
- Naskali L, Engelke M, Tahti H, et al. 1993. The effects of selected organic solvents on rat synaptosomal membrane fluidity and integral enzyme activities. *Neurosci Res Commun* 13(1):27-35.
- Naskali L, Oksanen H, Tahti H. 1994. Astrocytes as targets for CNS effects of organic solvents *in vitro*. *Neurotoxicology* 15(3):609-612.
- Nestmann ER, Lee EG. 1983. Mutagenicity of constituents of pulp and papermill effluent in growing cells of *Saccharomyces cerevisiae*. *Mutat Res* 119:273-280.
- Nestmann ER, Lee EG, Matula TI, et al. 1980. Mutagenicity of constituents identified in pulp and paper mill effluents using the Salmonella/mammalian-microsome assay. *Mutat Res* 79:203-212.
- NFPA. 1994. Ethylbenzene. Fire protection guide to hazardous materials. 11th ed. Quincy, MA: National Fire Protection Association, 49-65, 325-348.
- Nicola RM, Branchflower R, Pierce D. 1987. Chemical contaminants in bottomfish. *J Environ Health* 49:342-347.
- Nielsen GD, Alarie Y. 1982. Sensory irritation, pulmonary irritation, and respiratory stimulation by airborne benzene and alkylbenzenes: Prediction of safe industrial exposure levels and correlation with their thermodynamic properties. *Toxicol Appl Pharmacol* 65:459-477.
- NIOSH. 1981. Teratologic assessment of ethylbenzene and 2-ethoxyethanol. Cincinnati, OH: National Institute for Occupational Safety and Health. PB83208074.
- NIOSH. 1990. Ethylbenzene. Estimated numbers of employees potentially exposed to specific agents by 2-digit Standard Industrial Classification (SIC). National Occupational Exposure Survey conducted from 1981-1983. Centers for Disease Control. National Institute for Occupational Safety and Health. <http://www.cdc.gov/noes/>. August 22, 2007.
- NIOSH. 1994a. Method 1501. NIOSH manual of analytical methods. Washington, DC: U.S. Department of Health, Education, and Welfare, Public Health Service, Center for Disease Control, National Institute for Occupational Safety and Health.

## 9. REFERENCES

\*NIOSH. 1994b. Ethylbenzene. NIOSH pocket guide to chemical hazards. U.S. Department of Health, Education, and Welfare, Public Health Service, Center for Disease Control, National Institute for Occupational Safety and Health, 132-133.

NIOSH. 1995. Report to Congress on workers' home contamination study conducted under the worker's family Protection Act (29 U.S.C. 671a). DHHS (NIOSH) Publication No. 95-123. PB96192000HEF.

NIOSH. 2005. Ethylbenzene. NIOSH pocket guide to chemical hazards. Atlanta, GA: National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention. <http://www.cdc.gov/niosh/npg/> April 11, 2007.

NIOSH. 2009. NIOSH pocket guide to chemical hazards. RTECS. Benzene, ethyl- National Institute for Occupational Safety and Health. <http://www.cdc.gov/niosh/rtecs/daaa60.html>. February 18, 2010.

NIOSH/OSHA. 1978. Occupational health guidelines for ethyl benzene. Washington, DC: National Institute for Occupational Safety and Health. Occupational Safety and Health Administration.

Nishihara T, Nishikawa J, Kanayama T, et al. 2000. Estrogenic activities of 517 chemicals by yeast two-hybrid assay. *J Health Sci* 46(4):282-298.

Nong A, Charest-Tardif G, Tardif R, et al. 2007. Physiologically based modeling of the inhalation pharmacokinetics of ethylbenzene in B6C3F1 mice. *J Toxicol Environ Health A* 70(21):1838-1848.

Norppa H, Vainio H. 1983a. Induction of sister-chromatid exchanges by styrene analogues in cultured human lymphocytes. *Mutat Res* 116:379-387.

NRC. 1993. Pesticides in the diets of infants and children. National Research Council, Washington DC: National Academy Press. PB93216091.

NTP. 1986. Toxicology and carcinogenesis studies of xylenes (mixed) (60% m-xylene, 14% p-xylene, 9%-xylene, and 17% ethylbenzene) in F334/N rats and B6C3F1 mice (gavage studies). Research Triangle Park, NC: National Toxicology Program. NTP TR 327.

NTP. 1990. Toxicology and carcinogenesis studies of a-methylbenzyl alcohol in F344/N Rats and B6C3F1 mice (gavage studies) Research Triangle Park, NC: National Toxicology Program. No. 369.

NTP. 1992. Toxicity studies of ethylbenzene in F344/N rats and B6C3F<sub>1</sub> mice (inhalation studies). Research Triangle Park, NC: National Toxicology Program. NTP Tox 10. <http://inmagic.syrres.com/esc-images/NTIS/NTP/TOX010.pdf>. August 02, 2007.

NTP. 1999. NTP technical report on the toxicology and carcinogenesis studies of ethylbenzene in F344/N rats and B6C3F1 mice (inhalation studies). Research Triangle Park, NC: National Toxicology Program, U.S. Department of Health and Human Services. NTP TR 466.

NTP. 2005. Report on carcinogens. 11 ed. Research Triangle Park, NC: U.S. Department of Health and Human Services, Public Health Service National Toxicology Program. <http://ntp-server.niehs.nih.gov/ntp/roc/toc11.html>. March 08, 2006.

Nunes P, Benville PE. 1979. Uptake and depuration of petroleum hydrocarbons in the Manila clam, *Tapes semidecussata* reeve. *Bull Environ Contam Toxicol* 21:719-726.



## 9. REFERENCES

- Ogata M, Taguchi T. 1987. Quantitation of urinary metabolites of toluene, xylene, styrene, ethylbenzene, benzene and phenol by automated high-performance liquid chromatography. *Int Arch Occup Environ Health* 59:263-272.
- Ogata M, Taguchi T. 1988. Simultaneous determination of urinary creatinine and metabolites of toluene, xylene, styrene, ethylbenzene and phenol by automated high performance liquid chromatography. *Environ Health* 61(1/2):131-140.
- Ogata M, Fujisawa K, Ogino Y, et al. 1984. Partition coefficients as a measure of bioconcentration potential of crude oil compounds in fish and shellfish. *Bull Environ Contam Toxicol* 33:561-567.
- Ohta T, Ohyama T. 1985. A set of rate constants for the reactions of OH radicals with aromatic hydrocarbons. *Bull Chem Soc Jpn* 58:3029-3030.
- Oliver KD, Adams JR, Daughtrey EH, et al. 1996. Technique for monitoring toxic VOCs in air: Sorbent preconcentration, closed-cycle cooler cryofocusing and GC/MS analysis. *Environ Sci Technol* 30:1939-1945.
- OSHA. 2006a. Air contaminants. Occupational safety and health standards for shipyard employment. Occupational Safety and Health Administration. Code of Federal Regulations. 29 CFR 1915.1000 <http://www.osha.gov/comp-links.html>. April 11, 2007.
- OSHA. 2006b. Gases, vapors, fumes, dusts, and mists. Safety and health regulations for construction. Occupational Safety and Health Administration. Code of Federal Regulations. 29 CFR 1926.55, Appendix A. <http://www.osha.gov/comp-links.html>. April 11, 2007.
- OSHA. 2006c. Limits for air contaminants. Occupational safety and health standards. Occupational Safety and Health Administration. Code of Federal Regulations. 29 CFR 1910.1000. <http://www.osha.gov/comp-links.html>. April 11, 2007.
- OTA. 1990. Neurotoxicity: Identifying and controlling poisons of the nervous system. Washington, DC: Office of Technology Assessment. OTABA438.
- Otson R, Chan C. 1987. Sample handling and analysis for 51 volatile organics by an adapted purge and trap GC-MS technique. *Int J Environ Anal Chem* 30:275-287.
- Otson R, Kumarathasan P. 1995. An automated head space analysis method for xylenes and ethylbenzene in blood and water. *Chemosphere* 30(6):1109-1123.
- Otson R, Williams DT. 1981. Evaluation of a liquid-liquid extraction technique for water pollutants. *J Chromatogr* 212:187-198.
- Otson R, Williams DT. 1982. Headspace chromatographic determination of water pollutants. *Anal Chem* 54:942-946.
- Otson R, Fellin P, Tran Q. 1994. VOCs in representative Canadian residences. *Atmos Environ* 28(22):3563-3569.
- Overton EB, Stewart M, Carney R. 1995. Instrumental consideration for reliable fieldable VOC analyses. *J Hazard Mater* 43:77-89.

## 9. REFERENCES

- Owen GM, Brozek J. 1966. Influence of age, sex, and nutrition on body composition during childhood and adolescence. In: Falkner F, ed. Human development. Philadelphia, PA: Saunders, 222-238.
- Pellizzari ED, Hartwell TD, Harris BSH, et al. 1982. Purgeable organic compounds in mother's milk. *Bull Environ Contam Toxicol* 28:322-328.
- Pellizzari ED, Sheldon L, Keever J, et al. 1993. Determination of airborne organic compounds using tenax GC and gas chromatography mass spectrometry. Environmental carcinogens selected methods of analysis. Vol 7. IARC Publication No. 68. Lyon, France: International Agency for the Research on Cancer, 196-210.
- Pellizzari ED, Zweidinger RA, Sheldon LS. 1985. Method 23: Breath sampling. Environmental carcinogens selected methods of analysis. Vol 7. IARC Publication No. 68. Lyon, France: International Agency for the Research of Cancer, 399-411.
- Pierce CH, Dills RL, Silvey GW, et al. 1996. Partition coefficients between human blood or adipose tissue and air for aromatic solvents. *Scand J Work Environ Health* 22:112-118.
- Plumb RH. 1991. The occurrence of Appendix IX organic constituents in disposal site ground water. *Ground Water Monit Rev* 11(2):157-164.
- Polak J, Lu BCY. 1973. Mutual solubilities of hydrocarbons and water at 0 and 25 C. *Can J Chem* 51:4018-4023.
- Potter TL. 1993. Analysis of petroleum contaminated soil and water: An overview. In: Calabrese EJ, Kosteci PT, eds. Principles and practices for petroleum contaminated soils. Boca Raton, FL: Lewis Publishers, 1-14.
- Proctor NH, Hughes JP. 1978. Ethylbenzene. In: Chemical hazards of the workplace. Philadelphia, PA: J.B. Lippincott Company, 251-252.
- Pryor G, Rebert C, Kassay K, et al. 1991. The hearing loss associated with exposure to toluene is not caused by a metabolite. *Brain Res Bull* 27:109-113.
- Ptacek CJ, Cherry JA, Gillham RW. 1984. Mobility of dissolved petroleum derived hydrocarbon in sand aquifers. In: Vandermeulen JH, Hrudey SE, eds. Oil in freshwater: Chemistry, biology, countermeasure technology. New York, NY: Pergamon Press, 195-212.
- Pyykko K, Paavilainen S, Metsa-Ketela T, et al. 1987. The increasing and decreasing effects of aromatic hydrocarbon solvents on pulmonary and hepatic cytochrome P-450 in the rat. *Pharmacol Toxicol* 60:288-293.
- Quigley CJ, Corsi RL. 1995. Emissions of VOCs from a municipal sewer. *J Air Waste Manage Assoc* 45:395-403.
- Ramanand K, Balba MT, Duffy J. 1995. Biodegradation of select organic pollutants in soil columns under denitrifying conditions. *Haz Waste Haz Mater* 12(1):27-36.
- Ransley DL. 1984. Xylenes and ethylbenzene. In: Grayson M, ed. Kirk-Othmer encyclopedia of chemical technology. Vol. 24. New York, NY: John Wiley & Sons, 709-744.

## 9. REFERENCES

- Rao PSC, Hornsley AG, Kilcrease DF, et al. 1985. Sorption and transport of hydrophobic organic chemicals in aqueous and mixed solvent systems: Model development and preliminary evaluation. *J Environ Qual* 14:376-382
- Rappaport SM, Selvin S, Waters MA. 1987. Exposure to hydrocarbon components of gasoline in the petroleum industry. *Appl Ind Hyg* 2:148-154.
- Ravishankara AR, Wagner S, Fischer S, et al. 1978. A kinetics study of the reactions of hydroxyl with several aromatic and olefinic compounds. *Int J Chem Kinet* 10:783-804.
- Raykar PV, Fung MC, Anderson BD. 1988. The role of protein and lipid domains in the uptake of solutes by human stratum corneum. *Pharmacol Res* 5(3):140-150.
- Rhue RD, Rao PSC, Smith RE. 1988. Vapor-phase adsorption of alkyl benzenes and water on soils and clays. *Chemosphere* 17:727-741.
- Riedel K, Ruppert T, Conze C, et al. 1996. Determination of benzene and alkylated benzenes in ambient and exhaled air by microwave desorption coupled with gas chromatography-mass spectrometry. *J Chromatogr A* 719(2):383-389.
- \*Roberfroid M, Poncelet F, Lambotte-Vandepaer M, et al. 1978. Acute biotoxic effect of styrene on rat liver. Correlation with enzyme-mediated mutagenicity of benzpyrene and acrylonitrile. *Scand J Work Environ Health* 4:163-168.
- Roberts MS, Triggs EJ, Anderson RA. 1975. Permeability of solutes through biological membranes measured by a desorption technique. *Nature* 257:225-227.
- Romanelli A, Falzoi M, Mutti A, et al. 1986. Effects of some monocyclic aromatic solvents and their metabolites on brain dopamine in rabbits. *J Appl Toxicol* 6(6):431-435.
- Romer KG, Federsel RJ, Freundt KJ. 1986. Rise of inhaled toluene, ethyl benzene, m-xylene, or mesitylene in rat blood after treatment with ethanol. *Bull Environ Contam Toxicol* 37:874-876.
- Rosen AA, Skeel RT, Ettinger MB. 1963. Relationship of river water odor to specific organic contaminants. *J Water Pollut Cont Fed* 35:777-782.
- Rosenfeld JK, Plumb RH. 1991. Ground water contamination at wood treatment facilities. *Ground Water Monit Rev* 11:133-140.
- Rowell LB. 1986. Human circulation, regulation during physical stress. New York, NY: Oxford University Press, Inc., 96-98
- RTECS. 2009. Ethylbenzene. Registry of Toxic Effects on Chemical Substances. National Institute of Occupational Safety and Health. MDL Information Systems, Inc. February 18, 2010.
- Sack TM, Steele DH, Hammerstrom K, et al. 1992. A survey of household products for volatile organic compounds. *Atmos Environ* 26A(6):1063-1070.

## 9. REFERENCES

- Saillenfait AM, Gallissot F, Morel G, et al. 2003. Developmental toxicities of ethylbenzene, *ortho*-, *meta*-, *para*-xylene and technical xylenes in rats following inhalation exposure. *Food Chem Toxicol* 41:415-429.
- Saillenfait AM, Gallissot F, Sabate JP, et al. 2006. Developmental toxicity of combined ethylbenzene and methylethylketone administered by inhalation to rats. *Food Chem Toxicol* 44(8):1287-1298.
- Saillenfait AM, Gallissot F, Sabate JP, et al. 2007. Developmental toxic effects of ethylbenzene to toluene alone and in combination with butyl acetate in rats after inhalation exposure. *J Appl Toxicol* 27(1):32-42.
- Sams C, Loizou GD, Crocker J, et al. 2004. Metabolism of ethylbenzene by human liver microsomes and recombinant human cytochrome P450s (CYP). *Toxicol Lett* 147(3):253-260.
- Sauer PA, Tyler EJ. 1995. Heavy metal and volatile organic chemical removal and treatment in on-site wastewater infiltration systems. I. Catch basins and septic tanks. *Water Air Soil Pollut* 89:221-232.
- Sauer TC, Sackett WM, Jeffrey LM. 1978. Volatile liquid hydrocarbons in the surface coastal waters of the Gulf of Mexico. *Mar Chem* 7:1-16.
- Sax NI, Lewis RJ. 1989. Dangerous properties of industrial materials. Vol. II. 7th ed. New York, NY: Van Nostrand Reinhold, 1601.
- Scheuplein RJ. 1976. Permeability of the skin: A review of some major concepts. *J Invest Dermatol* 67:672-676.
- Schuberth J. 1996. A full evaporation headspace technique with capillary GC and ITD: A means for quantitating volatile organic compounds in biological samples. *J Chromatogr Sci* 34(7):314-319.
- Seely JC, Haseman JK, Nyska A, et al. 2002. Effect of chronic progressive nephropathy on the incidence of renal tubule cell neoplasms in control male F344 rats. *Toxicol Pathol* 30(6):681-686.
- \*Sequeira DJ, Eyer CS, Cawley GF, et al. 1992. Ethylbenzene-mediated induction of cytochrome P450 isozymes in male and female rats. *Biochem Pharmacol* 44(6):1171-1182.
- Seidel SD, Schisler MR, Kleinert KM. 2006. Evaluation of ethylbenzene in the mouse lymphoma (L5178Y TK+/-) forward mutation assay. Arlington, VA: American Chemistry Council.
- Setchell BP, Waites GMH. 1975. The blood-testis barrier. In: Creep RO, Astwood EB, Geiger SR, eds. *Handbook of physiology: Endocrinology V*. Washington, DC: American Physiological Society, 143-172.
- Seto Y. 1994. Determination of volatile substances in biological samples by headspace gas chromatography. *J Chromatogr A* 674:25-62.
- Sexton K, Adgate JL, Church TR, et al. 2005. Children's exposure to volatile organic compounds as determined by longitudinal measurements in blood. *Environ Health Perspect* 113(3):342-349.
- Shatkin JA, Brown HS. 1991. Pharmacokinetics of the dermal route of exposure to volatile organic chemicals in water: A computer simulation model. *Environ Res* 56(1):90-108.

## 9. REFERENCES

- Shirey RE. 1995. Rapid analysis of environmental samples using solid-phase microextraction (SPME) and narrow bore capillary columns. *J High Resol Chromatogr* 18(8):495-499.
- Sikkema J, De Bont J AM, Poolman B. 1995. Mechanisms of membrane toxicity of hydrocarbons. *Microbiol Rev* 59(2):201-222.
- Singh HB, Salas LJ, Cantrell BK, et al. 1985. Distribution of aromatic hydrocarbons in the ambient air. *Atmos Environ* 19:1911-1919.
- Singh HG, Salas LJ, Smith AJ, et al. 1981. Measurements of some potentially hazardous organic chemicals in urban environments. *Atmos Environ* 15:601-612.
- Sliwiska-Kowalska M, Zamyslowska-Szmytko E, Szymczak W, et al. 2001. Hearing loss among workers exposed to moderate concentrations of solvents. *Scand J Work Environ Health* 27(5):335-342.
- Smith JN, Smithies RH, Williams RT. 1954a. The metabolism of alkylbenzenes. Stereochemical aspects of the biological hydroxylation of ethylbenzene to methylphenylcarbinol. *Biochem J* 56:320-324.
- Smith JN, Smithies RH, Williams RT. 1954b. The metabolism of alkylbenzenes. (a) Glucuronic acid excretion following the administration of alkylbenzenes. (b) Elimination of toluene in the expired air of rabbits. *Biochem J* 56:317-320.
- Smith LA, Stock TH, Chung KC, et al. 2007. Spatial analysis of volatile organic compounds from a community-based air toxics monitoring network in Deer Park, Texas, USA. *Environ Monit Assess* 128(1-3):369-379.
- Smyth H, Carpenter CP, Weil CS, et al. 1962. Range finding toxicity data: List VI. *Am Ind Hyg Assoc J* 23:95-107.
- Snider EH, Manning FS. 1982. A survey of pollutant emission levels in wastewaters and residuals from the petroleum refining industry. *Environ Int* 7:237-258.
- Sollenberg J, Smallwood AW, Lowry LK. 1985. Determination of mandelic and phenylglyoxylic acids in rat urine by high-performance liquid chromatography and by isotachopheresis. *J Chromatogr* 343:175-178.
- Soukup DA, Ulery AL, Jones S. 2007. Distribution of petroleum and aromatic hydrocarbons at a former crude oil and natural gas production facility. *Soil Sediment Contam* 16(2):143-158.
- Sram RJ, Beskid O, Binkova B, et al. 2004. Cytogenetic analysis using fluorescence *in situ* hybridization (FISH) to evaluate occupational exposure to carcinogens. *Toxicol Lett* 149:335-344.
- SRI. 2006. Ethylbenzene. *Directory of chemical producers: United States of America*. Menlo Park, CA: SRI International, 593.
- Staples CA, Werner AF, Hoogheem TJ. 1985. Assessment of priority pollutant concentrations in the United States using STORET database. *Environ Toxicol Chem* 4:131-142.
- St-Germain F, Mamer O, Brunet J, et al. 1995. Volatile organic compound analysis by an inertial spray extraction interface coupled to an ion trap mass spectrometer. *Anal Chem* 67:4536-4541.

## 9. REFERENCES

- Stein VB, Narang RS. 1990. A simplified method for the determination of volatiles in eggs using headspace analysis with a photoionization detector. *Arch Environ Contam Toxicol* 19:593-596.
- Stokman SK. 1987. Estimations of concentrations of soluble petroleum hydrocarbons migrating into ground water from contaminated soil sources. Proceedings of the NWWA/API conference on petroleum hydrocarbons and organic chemicals in groundwater: Prevention, detection and restoration, Houston, Texas, November 1987. Dublin, OH: National Water Well Association, 541-558.
- Stott WT, Johnson KA, Bahnemann R, et al. 2003. Evaluation of potential modes of action of inhaled ethylbenzene in rats and mice. *Toxicol Sci* 71:53-66.
- Stubin AI, Brosnan TM, Porter KD, et al. 1996. Organic priority pollutants in New York City municipal wastewaters: 1989-1993. *Water Environ Res* 68(6):1037-1044.
- Stuermer DH, Ng DJ, Morris CJ. 1982. Organic contaminants in groundwater near an underground coal gasification site in northeastern Wyoming. *Environ Sci Technol* 16:582-587.
- Stump DG. 2004. A 28-day inhalation splenic antibody formation study of ethylbenzene in rats. Arlington, VA: American Chemistry Council.:1-398.
- Sugita T, Ishiwata H, Kawamura Y, et al. 1995. Headspace gas chromatographic analysis of residual volatile substances in polystyrene food containers. *J Food Hyg Soc Jpn* 36(2):263-268. (Japanese).
- Sullivan HR, Miller WM, McMahon RE. 1976. Reaction pathways of *in vivo* stereoselective conversion of ethylbenzene to (-)-mandelic acid. *Xenobiotica* 6:49-54.
- Susten AS, Niemeier RW, Simon SD. 1990. *In vivo* percutaneous absorption studies of volatile organic solvents in hairless mice. II. Toluene, ethylbenzene and aniline. *J Appl Toxicol* 10(3):217-225.
- Sutton C, Calder JA. 1975. Solubility of alkylbenzenes in distilled and seawater 25.0°C. *J Chem Eng Data* 20:320-322.
- Swann RL, Laskowski DA, McCall PJ, et al. 1983. A rapid method for the estimation of the environmental parameters octanol/water partition coefficient, soil sorption constant, water to air ratio, and water solubility. *Residue Rev* 85:17-28.
- Tang W, Hemm I, Eisenbrand G. 2000. Estimation of human exposure to styrene and ethylbenzene. *Toxicology* 144:39-50.
- \*Tanii H, Huang J, Hashimoto K. 1995. Structure-acute toxicity relationship of aromatic hydrocarbons in mice. *Toxicol Lett* 76(1):27-31.
- Tardif R, Charest-Tardif G, Brodeur J. 1996. Comparison of the influence of binary mixtures versus a ternary mixture of inhaled aromatic hydrocarbons on their blood kinetics in the rat. *Arch Toxicol* 70(7):405-13.
- Tardif R, Charest-Tarif G, Brodeur J, et al. 1997. Physiologically based pharmacokinetic modeling of a ternary mixture of alkyl benzenes in rats and humans. *Toxicol Appl Pharmacol* 144:120-134.
- Tardif R, Laparé S, Plaa GL, et al. 1991. Effect of simultaneous exposure to toluene and xylene on their respective biological exposure indices in humans. *Int Arch Occup Environ Health* 63:279-284.

## 9. REFERENCES

- Tegeris JS, Balster RL. 1994. A comparison of the acute behavioral effects of alkylbenzenes using a functional observational battery in mice. *Fundam Appl Toxicol* 22(2):240-250.
- Tester DJ, Harker RJ. 1981. Groundwater pollution investigations in the Great Ouse Basin. *Water Pollut Control* 80:614-631.
- Thienes C, Haley TJ. 1972. *Clinical toxicology*. 5th ed. Philadelphia, PA: Lea and Febiger, 126-127.
- Thomas K, Colborn T. 1992. Organochlorine endocrine disruptors in human tissue. In: Colborn T, Clement C, eds. *Chemically induced alterations in sexual and functional development: The wildlife/human connection*. Princeton, NJ: Princeton Scientific Publishing, 65-394.
- Thomas KW, Pellizzari ED, Cooper SD. 1991. A canister-based method for collection and GC/MS analysis of volatile organic compounds in human breath. *J Anal Toxicol* 15(2):54-59.
- Thomas KW, Pellizzari ED, Raymer JH, et al. 1992. Kinetics of low-level volatile organic compounds in breath - I. Experimental design and data quality. *J Exp Anal Environ Epidemiol* 2(2):45-66.
- Toftgard R, Nilsen OG. 1982. Effects of xylene and xylene isomers on cytochrome P-450 and *in vitro* enzymatic activities in rat liver kidney and lung. *Toxicology* 23:197-212.
- TRI06. 2008. TRI explorer: Providing access to EPA's toxics release inventory data. Washington, DC: Office of Information Analysis and Access. Office of Environmental Information. U.S. Environmental Protection Agency. Toxics Release Inventory. <http://www.epa.gov/triexplorer/>. April 23, 2008.
- Tsuruta H. 1982. Percutaneous absorption of organic solvents: III. On the penetration rates of hydrophobic solvents through excised rat skin. *Ind Health* 20:335-346.
- Ungvary G. 1986. Solvent effects on reproduction: Experimental toxicity. *Prog Clin Biol Res* 220:169-177.
- Ungváry G, Tátrai E. 1985. On the embryotoxic effects of benzene and its alkyl derivatives in mice, rats and rabbits. *Arch Toxicol Suppl* 8:425-430.
- USGS. 2006. Volatile organic compounds in the Nation's ground water and drinking-water supply wells. Reston, VA: U.S. Department of the Interior, U.S. Geological Survey.
- Vaalavirta L, Tähti H. 1995a. Astrocyte membrane Na<sup>+</sup>, K<sup>(+)</sup>-ATPase and Mg<sup>(2+)</sup>-ATPase as targets of organic solvent impact. *Life Sci* 57(24):2223-2230.
- Vaalavirta L, Tähti H. 1995b. Effects of selected organic solvents on the astrocyte membrane ATPase *in vitro*. *Clin Exper Pharmacol Physiol* 22(4):293-294.
- Van der Linden AC, Thijsse GJE. 1965. The mechanisms of microbial oxidations of petroleum hydrocarbons. *Adv Enzymol* 27:469-546.
- van Kleef RGDM, Henk PM, Vijverberg HPM, et al. 2008. Selective inhibition of human heteromeric alpha9alpha10 nicotinic acetylcholine receptors at a low agonist concentration by low concentrations of ototoxic organic solvents. *Toxicol In Vitro* 22(6):1568-1572.

## 9. REFERENCES

- Verhoeff AP, Suk J, Van Wijnen JH. 1988. Residential indoor air contamination by screen printing plants. *Int Arch Occup Environ Health* 60:201-209.
- Verschueren K. 1983. Handbook of environmental data on organic chemicals. 2nd ed. New York, NY: Van Nostrand Reinhold Co., 628-630.
- Vieira I, Sonnier M, Cresteil T. 1996. Developmental expression of CYP2E1 in the human liver: Hypermethylation control of gene expression during the neonatal period. *Eur J Biochem* 238(2):476-483.
- Vowles PD, Mantoura RFC. 1987. Sediment-water partition coefficients and HPLC retention factors of aromatic hydrocarbons. *Chemosphere* 16:109-116.
- Wadden RA, Scheff PA, Franke JE, et al. 1995. VOC emission rates and emission factors for a sheet fed offset printing shop. *Am Ind Hyg Assoc J* 56:368-376.
- Wade OL, Bishop JM, Donald KW. 1962. Cardiac output and regional blood flow. Oxford: Blackwell Scientific Publications, 86-107.
- Wakeham SG, Davis AC, Karas JL. 1983. Mesocosm experiments to determine the fate and persistence of volatile organic compound in coastal seawater. *Environ Sci Technol* 17:611-617.
- Wallace L, Pellizzari E, Hartwell T, et al. 1986. Concentrations of 20 volatile organic compounds in the air and drinking water of 350 residents of New Jersey compared with concentrations in their exhaled breath. *J Occup Med* 28:603-608.
- Wallace L, Pellizzari E, Hartwell TD, et al. 1987c. Exposures to benzene and other volatile compounds from active and passive smoking. *Arch Environ Health* 42:272-279.
- Wallace L, Zweidinger R, Erickson M, et al. 1982. Monitoring individual exposure measurements of volatile organic compounds in breathing-zone air, drinking water, and exhaled breath. *Environ Int* 8:269-282.
- Wallace LA. 1986. Personal exposures, indoor and outdoor air concentrations, and exhaled breath concentrations of selected volatile organic compounds measured for 600 residents of New Jersey, North Dakota, North Carolina and California. *Toxicol Environ Chem* 12:215-236.
- Wallace LA, Pellizzari ED, Hartwell TD, et al. 1987a. The TEAM study: Personal exposures to toxic substances in air, drinking water, and breath of 400 residents of New Jersey, North Carolina, and North Dakota. *Environ Res* 43:290-307.
- Wallace LA, Pellizzari ED, Hartwell TD, et al. 1989. The influence of personal activities on exposure to volatile organic compounds 1.2. *Environ Res* 50(1):37-55.
- Wallace LA, Pellizzari E, Leaderer B, et al. 1987b. Emissions of volatile organic compounds from building materials and consumer products. *Atmos Environ* 21:385-393.
- Wang BL, Takigawa T, Takeuchi A, et al. 2007. Unmetabolized VOCs in urine as biomarkers of low level exposure in indoor environments. *J Occup Health* 49(2):104-110.



## 9. REFERENCES

- Welch VA, Fallon KJ, Gelbke H-P. 2005. Ethylbenzene. Ullmann's encyclopedia of industrial chemistry. Weinheim: VCH Verlag GmbH & Co.  
[http://www.mrw.interscience.wiley.com/emrw/9783527306732/ueic/article/a10\\_035/current/pdf](http://www.mrw.interscience.wiley.com/emrw/9783527306732/ueic/article/a10_035/current/pdf). March 29, 2007.
- West JR, Smith HW, Chasis H. 1948. Glomerular filtration rate, effective renal blood flow, and maximal tubular excretory capacity in infancy. *J Pediat* 32:10-18.
- Whitehead LW, Ball GL, Fine LJ, et al. 1984. Solvent vapor exposures in booth spray painting and spray glueing, and associated operations. *Am Ind Hyg Assoc J* 45:767-772.
- WHO. 2000. Air quality guidelines. 2nd ed. Geneva, Switzerland: World Health Organization.  
<http://www.euro.who.int/Document/AIQ/AirQualRepMtg.pdf>. March 08, 2006.
- WHO. 2004. Guidelines for drinking-water quality. Vol. 1. Recommendations. 3rd ed. Geneva, Switzerland: World Health Organization. [http://www.who.int/water\\_sanitation\\_health/dwq/gdwq3/en/](http://www.who.int/water_sanitation_health/dwq/gdwq3/en/). March 08, 2006.
- Widdowson EM, Dickerson JWT. 1964. Chemical composition of the body. In: Comar CL, Bronner F, eds. Mineral metabolism: An advanced treatise. Volume II: The elements Part A. New York: Academic Press, 1-247.
- Wilson BH, Smith GB, Rees JF. 1986. Biotransformations of selected alkylbenzenes and halogenated aliphatic hydrocarbons in methanogenic aquifer material: A microcosm study. *Environ Sci Technol* 20:997-1002.
- Wolf MA, Rowe VK, McCollister DD, et al. 1956. Toxicological studies of certain alkylated benzenes and benzene: Experiments on laboratory animals. *AMA Arch Ind Health* 14:387-398.
- Wolff MS. 1976. Evidence for existence in human tissues of monomers for plastics and rubber manufacture. *Environ Health Perspect* 17:183-187.
- Wolff MS, Daum SM, Lorimer WV, et al. 1977. Styrene and related hydrocarbons in subcutaneous fat from polymerization workers. *J Toxicol Environ Health* 2:997-1005.
- Wollny H. 2000. Cell mutation assay at the thymidine kinase locus (TK +/-) in mouse lymphoma L5178Y cells (soft agar method) with ethylbenzene. Brussels, Belgium: CEFIC.
- \*Wrbitzky R, Goen T, Letzel S, et al. 1995. Internal exposure of waste incineration workers to organic and inorganic substances. *Int Arch Occup Environ Health* 68(1):13-21.
- Yadav JS, Reddy CA. 1993. Degradation of benzene, toluene, ethylbenzene, and xylenes (BTEX) by the lignin-degrading basidiomycete *Phanerochaete chrysosporium*. *Appl Environ Microbiol* 59(3):756-762.
- Yalkowsky SH, Valvani SC. 1976. Partition coefficients and surface areas of some alkylbenzenes. *J Med Chem* 19:727-728.
- Yamasaki Y. 1984. [The determination of urinary metabolites of ethylbenzene by high-performance liquid chromatography]. *Okayama Igakkai Zasshi* 96:531-535. (Japanese)

## 9. REFERENCES

- Yanagihara S, Shimada I, Shinoyama E, et al. 1977. Photochemical reactivities of hydrocarbons. In: Kasuga S, eds. Proceedings of the 4th International Clean Air Congress. Tokyo: Japanese Union of Air Pollution Prevention Associations, 472-477.
- Yant WP, Schrenk HH, Waite CP, et al. 1930. Acute response of guinea pigs to vapors of some new commercial organic compounds. II. Ethylbenzene. *Pub Health Rep* 45:1241-1250.
- \*Yuan W, Cawley GF, Eyer CS, et al. 1994. Induction of P450 3A by ethylbenzene without altering RNA levels. *Biochem Biophys Res Commun* 202(3):1259-1265.
- \*Yuan W, White T B, White J W, et al. 1995. Relationship between hydrocarbon structure and induction of P450: Effect on RNA levels. *Xenobiotica* 25(1):9-16.
- Zappi ME, Rogers BA, Teeter CL, et al. 1996. Bioslurry treatment of a soil contaminated with low concentration of total petroleum hydrocarbons. *J Hazard Mater* 46:1-12.
- Zeiger E, Anderson B, Haworth S, et al. 1992. Salmonella mutagenicity tests: V. Results from the testing of 311 chemicals. *Environ Mol Mutagen* 19(Supplement 21):2-141.
- Ziegler EE, Edwards BB, Jensen RL et al. 1978. Absorption and retention of lead by infants. *Pediatr Res* 12:29-34.
- Zielinska B, Sagebiel JC, Harshfield G, et al. 1996. Volatile organic compounds up to C20 emitted from motor vehicles; measurement methods. *Atmos Environ* 30(12):2269-2286.
- Zweidinger RB, Sigsby JE, Tejada SB, et al. 1988. Detailed hydrocarbon and aldehyde mobile source emissions from roadway studies. *Environ Sci Technol* 22:956-962.