

CHAPTER 8. REFERENCES

- AEGLs. 2018. Acute Exposure Guideline Levels (AEGLs) values. <https://www.epa.gov/aegl/access-acute-exposure-guideline-levels-aegls-values#chemicals>
- Agrawal A, Gutch M, Arora R, et al. 2011. Acute cardiogenic pulmonary oedema with multiorgan dysfunction--still to learn more about nitrobenzene poisoning. *BMJ Case Reports* 2011.
- AIHA. 2016. Current ERPG Values (2016). Fairfax, VA: American Industrial Hygiene Association. <https://www.aiha.org/get-involved/AIHAGuidelineFoundation/EmergencyResponsePlanningGuidelines/Documents/2016%20ERPG%20Table.pdf>.
- Albrecht W, Neumann H-G. 1985. Biomonitoring of aniline and nitrobenzene: hemoglobin-binding in rats and analysis of adducts. *Arch Toxicol* 571-5.
- Alcorn CJ, Simpson RJ, Leahy D, et al. 1991. In vitro studies of intestinal drug absorption: Determination of partition and distribution coefficients with brush border membrane vesicles. *Biochem Pharmacol* 42(12):2259-2264. [https://doi.org/10.1016/0006-2952\(91\)90228-W](https://doi.org/10.1016/0006-2952(91)90228-W).
- Allenby G, Sharpe RM, Foster PM. 1990. Changes in Sertoli cell function in vitro induced by nitrobenzene. *Fundam Appl Toxicol* 14(2):364-375.
- Allenby G, Foster PM, Sharpe RM. 1991. Evaluation of changes in the secretion of immunoreactive inhibin by adult rat seminiferous tubules in vitro as an indicator of early toxicant action on spermatogenesis. *Fundam Appl Toxicol* 16(4):710-724.
- Anderson D, Styles JA. 1978. The bacterial mutation test. *Br J Cancer* 37(6):924.
- Ashurst JV, Wasson MN, Hauger W, et al. 2010. Pathophysiologic Mechanisms, Diagnosis, and Management of Dapsone-Induced Methemoglobinemia. *Journal of American Osteopathic Association* 110(January):16-20.
- Ask K, Décologne N, Asare N, et al. 2004. Distribution of nitroreductive activity toward nilutamide in rat. *Toxicol Appl Pharmacol* 201(1):1-9. <https://doi.org/10.1016/j.taap.2004.04.006>.
- Aspinall R, Andrew D. 2000. Thymic involution in aging. *J Clin Immunol* 20(4):250-256. <https://doi.org/10.1023/A:1006611518223>.
- Assmann N, Emmrich M, Kampf G, et al. 1997. Genotoxic activity of important nitrobenzenes and nitroanilines in the Ames test and their structure-activity relationship. *Mutat Res* 395(2-3):139-144.
- Astier A. 1992. Simultaneous high-performance liquid chromatographic determination of urinary metabolites of benzene, nitrobenzene, toluene, xylene and styrene. *J Chromatogr B Biomed Appl* 573(2):318-322. [https://doi.org/10.1016/0378-4347\(92\)80136-E](https://doi.org/10.1016/0378-4347(92)80136-E).
- ATSDR. 2019. Full SPL data Agency for Toxic Substances and Disease Registry, Centers for Disease Control and Prevention. <http://www.atsdr.cdc.gov/SPL/resources>.
- Baby RE, Cabezas M, Walsøe de Reça EN. 2000. Electronic nose: a useful tool for monitoring environmental contamination. *Sensors Actuators B: Chem* 69(3):214-218.
- Balwani MR, Bawankule CP, Ramteke V, et al. 2017. Methylene blue induced methemoglobinemia with acute kidney injury in a glucose-6-phosphate dehydrogenase-deficient patient. *Indian J Nephrol* 27(6):465-467. 10.4103/ijn.IJN_316_16.
- Banerjee S, Yalkowsky SH, Valvani SC. 1980. Water solubility and octanol/water partition coefficients of organics. Limitations of the solubility-partition coefficient correlation. *Environ Sci Technol* 14(10):1227-1229.
- Bao Y, Huang Q, Li Y, et al. 2012. Prediction of nitrobenzene toxicity to the algae (*Scenedesmus obliquus*) by quantitative structure-toxicity relationship (QSTR) models with quantum chemical descriptors. *Environ Toxicol Pharmacol* 33(1):39-45.
- Barr DB, Turner WE, DiPietro E, et al. 2002. Measurement of p-nitrophenol in the urine of residents whose homes were contaminated with methyl parathion. *Environ Health Perspect* 110 Suppl 6(Suppl 6):1085-1091. 10.1289/ehp.02110s61085.

8. REFERENCES

- Barth EF, Bunch RL. 1979. Removability, biodegradation and treatability of specific pollutants. Washington, DC, US Environmental Protection Agency.
- Beauchamp Jr. RO, Irons RD, Rickert DE, et al. 1982. A critical review of the literature on nitrobenzene toxicity. *Crit Rev Toxicol* 11(1):33-84. 10.3109/10408448209089848.
- Bell LS, Devlin JF, Gillham RW, et al. 2003. A sequential zero valent iron and aerobic biodegradation treatment system for nitrobenzene. *Journal Of Contaminant Hydrology* 66(3-4):201-217.
- Biodynamics. 1983. A range finding study to evaluate the toxicity of nitrobenzene in the pregnant rabbit. Project number 83-2723.
- Biodynamics. 1984. Initial submission: An inhalation teratology study in rabbits with nitrobenzene with cover letter dated 082892. EPA/OTS 920007432#88-920007432.
- Blaauboer BJ, Van Holsteijn CWM. 1983. Formation and disposition of N-hydroxylated metabolites of aniline and nitrobenzene by isolated rat hepatocytes. *Xenobiotica* 13(5):295-302. 10.3109/00498258309052267.
- Bloom JC, Brandt JT. 2019. Chapter 11. Toxic Responses of the Blood. In: Klassen C, ed. Casarett and Doull's Toxicology: The Basic Science of Poisons. New York, NY: McGraw-Hill.
- Bojar RM, Rastegar H, Payne DD, et al. 1987. Methemoglobinemia from intravenous nitroglycerin: a word of caution. *Ann Thorac Surg* 43(3):332-334. 10.1016/s0003-4975(10)60627-3.
- Bonacker D, Stoiber T, Böhm KJ, et al. 2004. Chromosomal genotoxicity of nitrobenzene and benzonitrile. *Arch Toxicol* 78(1):49-57.
- Bonnefoy A, Chiron S, Botta A. 2012. Environmental nitration processes enhance the mutagenic potency of aromatic compounds. *Environ Toxicol* 27(6):321-331.
- Boukobza M, Garnier R, Cleophax C, et al. 2015. CT and MRI findings and follow-up after massive nitrobenzene ingestion. A case report. *J Neurol Sci* 357(1-2):322-325.
- Bozzelli JW, Kebbekus BB. 1982. A study of some aromatic and halocarbon vapors in the ambient atmosphere of New Jersey. *Journal of Environmental Science Health Part A* 17(5):693-711.
- Briggs GG. 1981. Theoretical and experimental relationships between soil adsorption, octanol-water partition coefficients, water solubilities, bioconcentration factors, and the parachor. *J Agric Food Chem* 29(5):1050-1059. 10.1021/jf00107a040.
- Bronaugh RL, Maibach HI. 1985. Percutaneous absorption of nitroaromatic compounds: in vivo and in vitro studies in the human and monkey. *Journal of Investigative Dermatology* 84(3):180-183.
- Bryant C, DeLuca M. 1991. Purification and characterization of an oxygen-insensitive NAD(P)H nitroreductase from *Enterobacter cloacae*. *J Biol Chem* 266(7):4119-4125.
- Burns LH, Cline DM, Lassiter RR. 1981. Exposure Analysis Model System (EXAMS). Athens, GA: US Environmental Protection Agency, Athens Environmental Research Laboratory.
- Burns, L.A., Bradley, S.G., White, K.L., McCay, J.A., Fuchs, B.A., Stern, M., Brown, R.D., Musgrove, D.L., Holsapple, M.P., Luster, M.I., Munson, A.E. 1994. Immunotoxicity of Nitrobenzene in Female B6C3F1 Mice. *Drug and Chemical Toxicology*, 17 (3) 271-315
- Butterworth BE, Smith-Oliver T, Earle L, et al. 1989. Use of primary cultures of human hepatocytes in toxicology studies. *Cancer Res* 49(5):1075-1084.
- Calabrese EJ. 1991. Principles of animal extrapolation: CRC Press Taylor Francis Group.
- Canton JH, Slooff W, Kool HJ, et al. 1985. Toxicity, biodegradability, and accumulation of a number of Cl/N-containing compounds for classification and establishing water quality criteria. *Reg Toxicol Pharmacol* 5(2):123-131.
- Car BD, Eng VM, Everds NE, et al. 2005. Clinical pathology of the rat. In: Suckow MA, Weisbroth SH, & Franklin CL, ed. *The Laboratory Rat* 2 ed. Elsevier
- Carreón T, Hein MJ, Hanley KW, et al. 2014. Bladder cancer incidence among workers exposed to o-toluidine, aniline and nitrobenzene at a rubber chemical manufacturing plant. *Occup Environ Med* 71(3):175-182.
- Carter FW. 1936. An unusual case of poisoning, with some notes on non-alkaloidal organic substances. *Med J Aust* 2(17):558-564.

8. REFERENCES

- Castle L, Philo MR, Sharman M. 2004. The analysis of honey samples for residues of nitrobenzene and petroleum from the possible use of Frow mixture in hives. *Food Chem* 84(4):643-649.
- Cattley RC, Everitt JI, Gross EA, et al. 1994. Carcinogenicity and toxicity of inhaled nitrobenzene in B6C3F1 mice and F344 and CD rats. *Fundam Appl Toxicol* 22(3):328-340.
- CDC. 2009. Fourth report on human exposure to environmental chemicals. Atlanta, GA: U.S: Department of Health and Human Services, Centers for Disease Control and Prevention. <https://www.cdc.gov/exposurereport/>.
- CDC. 2021a. Fourth report on human exposure to environmental chemicals. Updated tables March 2021. Volume one: NHANES 1999-2010. Department of Health and Human Services, Centers for Disease Control and Prevention. <https://www.cdc.gov/exposurereport/index.html>.
- CDC. 2021b. Fourth report on human exposure to environmental chemicals. Updated tables March 2021. Volume two: NHANES 2011-2016. Department of Health and Human Services, Centers for Disease Control and Prevention. <https://www.cdc.gov/exposurereport/index.html>.
- Chang MJW, Kao GI, Tsai CT. 1993. Biological monitoring of exposure to low dose aniline, p-aminophenol, and acetaminophen. *Bull Environ Contam Toxicol* 51(4):494-500. 10.1007/bf00192163.
- Chemical Marketing Reporter. 1987. Chemical profiles: Nitrobenzene. 50.
- Chiu C, Lee L, Wang C, et al. 1978. Mutagenicity of some commercially available nitro compounds for *Salmonella typhimurium*. *Mutat Res* 58(1):11-22. 10.1016/0165-1218(78)90090-3.
- Chongtham DS, Phurailatpam J, Singh MM, et al. 1997. Methaemoglobinemia in nitrobenzene poisoning. *Journal Of Postgraduate Medicine* 43(3):73-74.
- Chou Lin W, Speece RE, Siddiqi RH. 1978. Acclimation and degradation of petrochemical wastewater components by methane fermentation. Paper presented at the Biotechnol. Bioeng. Symp.:(United States).
- CIIT. 1993. Volume 1: A chronic inhalation toxicity study of nitrobenzene in b6c3f1 mice, fischer 344 rats and sprague-dawley (cd) rats. EPA/OTS 0794-0970.
- CLPSD. 1988. Contract Laboratory Program Statistical Database. Viar and Company, Management Services Division, Alexandria, VA.
- Cole RH, Frederick RE, Healy RP, et al. 1984. Preliminary findings of the priority pollutant monitoring project of the nationwide urban runoff program. 56 *J Water Pollut Control Fed* 898-908.
- Collins JV, Mayo DR, Riordan BJ. 1981. Economic impact analysis of proposed test rule for nitrobenzene. Washington, DC: U.S. Environmental Protection Agency, Office of Pesticides and Toxic Substances.
- Cupitt LT. 1980. Fate of Toxic and Hazardous Materials in the Air Environment. Atmospheric Chemistry and Physics Lab. US Environmental Protection Agency, Research Triangle Park, NC, EPA 600/603-680-084, NTIS No. PB680-221948.
- Dai Y, Mihara Y, Tanaka S, et al. 2010. Nitrobenzene-adsorption capacity of carbon materials released during the combustion of woody biomass. *J Hazard Mater* 174(1-3):776-781.
- Dai Y, Terui N, Lin Y, et al. 2010. Determination of nitrobenzene in water and ice samples collected from the Songhua River after an explosion of a petrochemical plant and investigation on enclosing behavior of nitrobenzene into ice. *Analytical Sciences: The International Journal Of The Japan Society For Analytical Chemistry* 26(4):519-523.
- Dana MT, Lee RN, Hales JM. 1984. Hazardous air pollutants: Wet removal rates and mechanisms. NTIS, SPRINGFIELD, VA.
- Dangwal SK, Jethani BM. 1980. A simple method of determination of nitrobenzene and nitrochlorobenzene in air and urine. *Am Ind Hyg Assoc J* 41(11):847-850.
- Dasgupta A, Matos J, Muramatsu H, et al. 2018. Nanostructured carbon materials for enhanced nitrobenzene adsorption: Physical vs. chemical surface properties. *Carbon* 139833-844.
- Daubert TE, Danner RP. 1989. Data Compilation, Tables of Properties of Pure Compds NY, NY
- Davis EM, Murray HE, Liehr JG, et al. 1981. Basic microbial degradation rates and chemical byproducts of selected organic compounds. *Water Res* 15(9):1125-1127.

8. REFERENCES

- Davis EM, Turley JE, Casserly DM, et al. 1983. Partitioning of selected organic pollutants in aquatic ecosystems.
- Davis B. 2012. Endometrial stromal polyps in rodents: biology, etiology, and relevance to disease in women. *Toxicol Pathol* 40(3):419-424. <https://doi.org/10.1177/0192623311431466>.
- Dellarco VL, Prival MJ. 1989. Mutagenicity of nitro compounds in salmonella typhimurium in the presence of flavin mononucleotide in a preincubation assay. *Environ Mol Mutagen* 13:116-127.
- DeSesso JM, Scialli AR. 2018. Bone development in laboratory mammals used in developmental toxicity studies. *Birth Defects Res* 110(15):1157-1187. <https://doi.org/10.1002/bdr2.1350>.
- DFG. 2012. List of MAK and BAT values 2012. Commission for the investigation of health hazards of chemical compounds in the work area.
- Dodd DE, Fowler EH, Snellings WM, et al. 1987. Reproduction and fertility evaluations in CD rats following nitrobenzene inhalation. *Fundamental Applied Toxicology* 8(4):493-505.
- DOE. 2018. Table 3: Protective Action Criteria (PAC) Rev. 28A based on applicable 60-minute AEGLs, ERPGs, or TEELs. The chemicals are listed by CASRN. June 2018. Oak Ridge, TN: U.S. Department of Energy. https://sp.eota.energy.gov/pac/docs/Revision_29A_Table3.pdf.
- Dong J, Zhao Y, Zhao R, et al. 2010. Effects of pH and particle size on kinetics of nitrobenzene reduction by zero-valent iron. *J Environ Sci (China)* 22(11):1741-1747.
- Dorfman LM, Adams GE. 1973. Reactivity of the hydroxyl radical in aqueous solutions National Standard Reference Data System.
- Dorigan J, Hushon JM. 1976. Air pollution assessment of nitrobenzene: Mitre Corporation.
- Draper WM, Crosby DG. 1984. Solar photooxidation of pesticides in dilute hydrogen peroxide. *J Agric Food Chem* 32(2):231-237.
- D'sa SR, Victor P, Jagannati M, et al. 2014. Severe methemoglobinemia due to ingestion of toxicants. *Clin Toxicol* 52(8):897-900.
- Dunlap KL. 1981. Nitrobenzene and nitrotoluenes. In: Grayson M, Eckroth D, eds. *Kirk Othmer encyclopedia of chemical technology*. John Wiley and Sons, Inc 3916-932.
- Dupont. 1981. Initial submission: Acute inhalation toxicity of benzene, nitro in male Crl:Cd rats with cover letter dated 090292
- Ellis DD, Jone CM, Larson RA, et al. 1982. Organic constituents of mutagenic secondary effluents from wastewater treatment plants. *Arch Environ Con Toxicol* 11(3):373-382.
- Enfield CG, Walters DM, Wilson JT, et al. 1986. Behavior of organic pollutants during rapid-infiltration of wastewater into soil: I. Processes, definition, and characterization using a microcosm. *Hazardous Waste and Hazardous Materials* 3(1):57-76.
- EPA. 1980a. Ambient water quality criteria for nitrobenzene: The Division.
- EPA. 1982a. Test method: Nitroaromatics and isophorone - method 609. In: Longbottom JE, Lichtenberg 53, eds. *Test methods: Methods for organic chemical analysis of municipal and industrial wastewater*. Cincinnati, OH: U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory EPA-600/604-682-057.
- EPA. 1982b. Test method: Base/neutrals and acids - method 625. In: Longbottom JE, Lichtenberg JJ, eds. *Test methods: Methods for organic chemical analysis of municipal and industrial wastewater*. Cincinnati, OH: U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory EPA-600/604-682-057.
- EPA. 1983a. Nitrobenzene. In: *Treatability manual: Volume I. Treatability data*. Washington, DC: U.S. Environmental Protection Agency, Office of Research and Development EPA-600/602-682-00601a.
- EPA. 1984. U.S. Environmental Protection Agency. *Federal Register* 49:25013-25017. .
- EPA. 1985. Health and environmental effects profile for nitrobenzene. Cincinnati, OH: U.S. Environmental Protection Agency, Office of Research and Development EPA/600/X-685/365 NTIS No. PB688-180500. .

8. REFERENCES

- EPA. 1986b. Method 8090: Nitroaromatics and cyclic ketones. In: Test methods for evaluating solid waste. Washington, DC: U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. .
- EPA. 1986c. Method 8250: Gas chromatography/mass spectrometry for semivolatile organics: Packed column technique. In: Test methods for evaluating solid waste. . Washington, DC: U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response.
- EPA. 1986d. Method 8270: Gas chromatography/mass spectrometry for semivolatile organics: Capillary column technique. In: Test methods for evaluating solid waste. Washington, DC: U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response.
- EPA. 1988a. U.S. Environmental Protection Agency: Part II. Federal Register 53:31138-31222.
- EPA. 1989. U.S. Environmental Protection Agency: Part II. Federal Register 54:1056-1119.
- EPA. 1999. Section 313 of the Emergency Planning and Community Right-to-Know Act. Toxic Chemical Release Inventory. Washington, DC: U.S. Environmental Protection Agency, Office of Pollution Prevention and Toxics <https://www.epa.gov/sites/production/files/documents/1999chem.pdf>. EPA 745-B-99-005.
- EPA. 2017. Initial List of Hazardous Air Pollutants with Modifications. <https://www.epa.gov/haps/initial-list-hazardous-air-pollutants-modifications>
- EPA. 2018. Appendix A To Part 423—126 Priority Pollutants. Steam Electric Power Generating Point Source Category. Code of Federal Regulations 40 CFR 423. <https://www.govinfo.gov/content/pkg/CFR-2018-title40-vol31/xml/CFR-2018-title40-vol31-part423.xml>.
- EPA. 2019. Table II. EPCRA Section 313 Chemical List For Reporting Year 2018 (including Toxic Chemical Categories). U.S. Environmental Protection Agency: https://www.epa.gov/sites/production/files/2019-03/documents/ry_2018_tri_chemical_list.pdf.
- EPA. 2020a. Hazardous waste injection restrictions. Code of Federal Regulations 40 CFR 148. https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.26.268#se40.29.268_148
- EPA. 2020b. Land disposal restrictions. Code of Federal Regulations 40 CFR 268. <https://www.ecfr.gov/cgi-bin/text-idx?SID=735d0c65a78b400ddac15114fb63a0ac&mc=true&node=pt40.25.148&rgn=div5>
- Eskenazi B, Harley K, Bradman A, et al. 2004. Association of in utero organophosphate pesticide exposure and fetal growth and length of gestation in an agricultural population. *Environ Health Perspect* 112(10):1116-1124. 10.1289/ehp.6789.
- Ewert R, Buttgerit F, Prügel M, et al. 1998. Intravenous injection of India ink with suicidal intent. *International Journal Of Legal Medicine* 111(2):91-92.
- Eyer P. 1979. Reactions of nitrosobenzene with reduced glutathione. *Chem-Biol Interact* 24(2):227-239. [https://doi.org/10.1016/0009-2797\(79\)90011-5](https://doi.org/10.1016/0009-2797(79)90011-5).
- Eyer P, Ascherl M. 1987. Reactions of para-Substituted Nitrosobenzenes with Human Hemoglobin. In *Biological Chemistry Hoppe-Seyler* (Vol. 368, pp. 285).
- Facchini V, Griffiths LA. 1981. The involvement of the gastro-intestinal microflora in nitro-compound-induced methaemoglobinaemia in rats and its relationship to nitrogroup reduction. *Biochem Pharmacol* 30(9):931-935. [https://doi.org/10.1016/0006-2952\(81\)90036-8](https://doi.org/10.1016/0006-2952(81)90036-8).
- Feldmann RJ, Maibach HI. 1970. Absorption of some organic compounds through the skin in man. *Journal of Investigative Dermatology* 54(5):399-404. <https://doi.org/10.1111/1523-1747.ep12259184>.
- Francis GJ, Langford VS, Milligan DB, et al. 2009. Real-time monitoring of hazardous air pollutants. *Anal Chem* 81(4):1595-1599. 10.1021/ac802510h.
- Freitag D, Geyer H, Kraus A, et al. 1982. Ecotoxicological profile analysis: VII. Screening chemicals for their environmental behavior by comparative evaluation. *Ecotoxicology Environmental Safety* 6(1):60-81.
- Fritz H, Hess R. 1970. Ossification of the rat and mouse skeleton in the perinatal period. *Teratology* 3(4):331-338. 10.1002/tera.1420030409.

8. REFERENCES

- Fu W, Fu H, Skøtt K, et al. 2008. Modeling the spill in the Songhua River after the explosion in the petrochemical plant in Jilin. *Environmental Science And Pollution Research International* 15(3):178-181.
- Garner RC, Nutman CA. 1977. Testing of some azo dyes and their reduction products for mutagenicity using *Salmonella typhimurium* TA 1538. *VJ Mutation Research/Fundamental Molecular Mechanisms of Mutagenesis* 44(1):9-19.
- Gatermann R, Huehnerfuss H, Rimkus G, et al. 1995. The distribution of nitrobenzene and other nitroaromatic compounds in the North Sea. *Mar Pollut Bull* 30(3):221-227.
- Goldfrank L, Lewin N, Flomenbaum N, et al. 1998. *Goldfrank's Toxicologic Emergencies / Edition 6* (Vol. 11): McGraw-Hill Professional Publishing.
- Goldstein RS, Chism JP, Hamm TJ. 1984. Influence of diet on intestinal microfloral metabolism and toxicity of nitrobenzene. *Toxicologist* 4:143.
- Goldstein RS, Chism JP, Sherrill JM, et al. 1984. Influence of dietary pectin on intestinal microfloral metabolism and toxicity of nitrobenzene. *Toxicol Appl Pharmacol* 75(3):547-553.
- Goldstein RS, Rickert DE. 1984. Macromolecular covalent binding of [¹⁴C] nitrobenzene in the erythrocyte and spleen of rats and mice. *Chem-Biol Interact* 50(1):27-37.
- Gu D, Shao N, Zhu Y, et al. 2017. Solar-driven thermo- and electrochemical degradation of nitrobenzene in wastewater: Adaptation and adoption of solar STEP concept. *J Hazard Mater* 321:703-710.
- Gupta G, Poddar B, Salaria M, et al. 2000. Acute nitrobenzene poisoning. *Indian Pediatrics* 37(10):1147-1148.
- Gupta A, Jain N, Agrawal A, et al. 2012. A fatal case of severe methaemoglobinemia due to nitrobenzene poisoning. *Emergency Medicine Journal: EMJ* 29(1):70-71.
- Gutteridge JM. 1995. Lipid peroxidation and antioxidants as biomarkers of tissue damage. *Clin Chem* 41(12):1819-1828.
- Guy RH, Hadgraft J, Maibach HI. 1985. Percutaneous absorption in man: a kinetic approach. *Toxicology Appl Pharmacol* 78(1):123-129.
- Hallas LE, Alexander M. 1983. Microbial transformation of nitroaromatic compounds in sewage effluent. *Appl Environ Microbiol* 45(4):1234-1241.
- Hamm Jr. TE, Phelps M, Raynor TH, et al. 1984. Ninety day inhalation toxicity study of nitrobenzene in F-344 rats, and CD rats and B6C3F1 mice. Research Triangle Park, NC: Chemical Industry Institute of Technology.
- Hanley KW, Viet SM, Hein MJ, et al. 2012. Exposure to o-toluidine, aniline, and nitrobenzene in a rubber chemical manufacturing plant: a retrospective exposure assessment update. *J Occup Env Hyg* 9(8):478-490.
- 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. *Journal of the Air Pollution Control Association* 33(12):1177-1183.
- Harkov R, Kebbekus B, Bozzelli JW, et al. 1984. Comparison of selected volatile organic compounds during the summer and winter at urban sites in New Jersey. *Sci Total Environ* 38:259-274.
- Harkov R, Gianti Jr SJ, Bozzelli JW, et al. 1985. Monitoring volatile organic compounds at hazardous and sanitary landfills in New Jersey. *Journal of Environmental Science Health Part A* 20(5):491-501.
- Hastings SH, Matsen FA. 1948. The photodecomposition of nitrobenzene. *Journal of the American Chemical Society* 70(10):3514-3515.
- Haworth S, Lawlor T, Mortelmans K, et al. 1983. *Salmonella* mutagenicity test results for 250 chemicals. *Environmental mutagenesis* 5(S1):3-49.
- Haynes W. 2015. *CRC handbook of chemistry and physics: A ready-reference book of chemical and physical data*. 95th ed. Boca Raton, FL: CRC Press.
- He M-C, Sun Y, Li X-R, et al. 2006. Distribution patterns of nitrobenzenes and polychlorinated biphenyls in water, suspended particulate matter and sediment from mid- and down-stream of the Yellow River (China). *Chemosphere* 65(3):365-374.

8. REFERENCES

- Ho C-H, Clark BR, Guerin MR, et al. 1981. Analytical and biological analyses of test materials from the synthetic fuel technologies: IV. Studies of chemical structure-mutagenic activity relationships of aromatic nitrogen compounds relevant to synfuels. *Mutation Research/Environmental Mutagenesis Related Subjects* 85(5):335-345.
- Holder JW. 1999. Nitrobenzene carcinogenicity in animals and human hazard evaluation. *Toxicology & Industrial Health* 15(5):445-457.
- Huang Q, Wang L, Han S. 1995. The genotoxicity of substituted nitrobenzenes and the quantitative structure-activity relationship studies. *Chemosphere* 30(5):915-923.
- Huang QG, Kong LR, Liu YB, et al. 1996. Relationships between molecular structure and chromosomal aberrations in in vitro human lymphocytes induced by substituted nitrobenzenes. *Bull Environ Contam Toxicol* 57(3):349-353.
- Hughes TJ, Sparacino C, Frazier S. 1984. Validation of chemical and biological techniques for evaluation of vapors in ambient air/mutagenicity testing of twelve(12) vapor-phase compounds. U.S. Environmental Protection Agency, Research Triangle Park, NC EPA 600/1-684-005.
- Hurley R, Testa AC. 1966. Photochemical $n \rightarrow \pi^*$ Excitation of Nitrobenzene. *J Am Chem Soc* 88(19):4330-4332.
- Hurley R, Testa AC. 1967. Nitrobenzene photochemistry. II. Protonation in the excited state. *J Am Chem Soc* 89(26):6917-6919.
- IARC. 1996. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: Printing Processes and Printing Inks, Carbon Black and Some Nitro Compounds. Lyon, France: International Agency for Research on Cancer.
- IARC. 2019. Agents classified by the IARC monographs. Volumes 1–123 Lyon, France: International Agency for Research on Cancer. https://monographs.iarc.fr/wp-content/uploads/2019/02/List_of_Classifications.pdf.
- Iida S, Misaka H, Naya M. 1997. A flow cytometric analysis of cytotoxic effects of nitrobenzene on rat spermatogenesis. *The Journal Of Toxicological Sciences* 22(5):397-407.
- Ikeda M, Kita A. 1964. Excretion of p-nitrophenol and p-aminophenol in the urine of a patient exposed to nitrobenzene. *Occup Environ Med* 21(3):210-213.
- IRIS. 2009. Nitrobenzene; CASRN 98-95-3. Washington, DC: U.S. Environmental Protection Agency. https://cfpub.epa.gov/ncea/iris/iris_documents/documents/toxreviews/0079tr.pdf.
- Jury WA, Spencer WF, Farmer WJ. 1984. Behavior assessment model for trace organics in soil: III. Application of screening model 1. *Journal of Environmental Quality* 13(4):573-579.
- Kao J, Faulkner J, Bridges JW. 1978. Metabolism of aniline in rats, pigs and sheep. *Drug Metab Disposition* 6(5):549-555.
- Kao AS. 1994. Formation and removal reactions of hazardous air pollutants. *J Air Waste Manage Assoc* 44(5):683-696. 10.1080/1073161X.1994.10467272.
- Kawaguchi T, Kawachi M, Morikawa M, et al. 2004. Key parameters of sperm motion in relation to male fertility in rats given alpha-chlorohydrin or nitrobenzene. *The Journal Of Toxicological Sciences* 29(3):217-231.
- Kawashima K, Usami M, Sakemi K, et al. 1995. Studies on the establishment of appropriate spermatogenic endpoints for male fertility disturbance in rodent induced by drugs and chemicals. I. Nitrobenzene. *The Journal of Toxicological Sciences* 20(1):15-22.
- Kiese M. 1966. The biochemical production of ferrihemoglobin-forming derivatives from aromatic amines, and mechanisms of ferrihemoglobin formation. *Pharmacol Rev* 18(3):1091-1161.
- Kincannon DF, Stover EL, Nichols V, et al. 1983. Removal mechanisms for toxic priority pollutants. *J Water Pollut Control Fed* (55):157-163.
- Kincannon DF, Lin YS. 1985. Microbial degradation of hazardous wastes by land treatment. *Proc Indust Waste Conf* 40607-619.
- Kissel JC, Curl CL, Kedan G, et al. 2005. Comparison of organophosphorus pesticide metabolite levels in single and multiple daily urine samples collected from preschool children in Washington State.

8. REFERENCES

- Journal of Exposure Science & Environmental Epidemiology 15(2):164-171.
10.1038/sj.jea.7500384.
- Kligerman AD, Erexson GL, Wilmer JL, et al. 1983. Analysis of cytogenetic damage in rat lymphocytes following in vivo exposure to nitrobenzene. *J Toxicology letters* 18(3):219-226.
- Kopfler FC, Melton RG, Mullaney JL, et al. 1977. Human exposure to water pollutants. In:ed. Fate of pollutants in the air and water environments; part 2: Chemical and biological fate of pollutants in environment. J. Wiley, 419-433.
- Korte F, Klein W. 1982. Degradation of benzene in the environment. *Ecotoxicol. Environ. Saf.* 6(4).
- Kudale S, Sethi SK, Dhaliwal M, et al. 2014. Methemoglobinemia due to quinine causing severe acute kidney injury in a child. *Indian J Nephrol* 24(6):394-396. 10.4103/0971-4065.134681.
- Kumar A, Chawla R, Ahuja S, et al. 1990. Nitrobenzene poisoning and spurious pulse oximetry. *Anaesthesia* 45(11):949-951.
- Kumar A, Bhavsar C, Aggarwal P, et al. 2017. Toxic brain injury with nitrobenzene poisoning. *Int J Appl Basic Med Res* 7(3):207-209. 10.4103/ijabmr.IJABMR_271_16.
- LaRegina J, Bozzelli JW, Harkov R, et al. 1986. Volatile organic compounds at hazardous waste sites and a sanitary landfill in New Jersey. *J Environmental progress* 5(1):18-27.
- Leader SD. 1932. Nitrobenzene poisoning (report of an unusual case in a child). *J Arch Pediat* 49245.
- Lee CH, Kim SH, Kwon DH, et al. 2013. Two cases of methemoglobinemia induced by the exposure to nitrobenzene and aniline. *Annals Of Occupational and Environmental Medicine* 25(1):31-31.
- Lei B, Huang S, Qiao M, et al. 2008. Prediction of the environmental fate and aquatic ecological impact of nitrobenzene in the Songhua River using the modified AQUATOX model. *J Environ Sci* 20769-777.
- Levin AA, Dent JG. 1982. Comparison of the metabolism of nitrobenzene by hepatic microsomes and cecal microflora from Fischer-344 rats in vitro and the relative importance of each in vivo. *J Drug Metabolism Disposition* 10(5):450-454.
- Levin AA, Dent JG. 1982a. Nitrobenzene metabolism in vitro: Comparison of cecal microflora and hepatic microsomes from Fischer-344 rats [Abstract]. Proceedings of the 5th CIIT Conference of Toxicology: Toxicity of Nitroaromatic Compounds, January 28-29, Raleigh, NC.
- Levin AA, Bosakowski T, Earle LL, et al. 1988. The reversibility of nitrobenzene-induced testicular toxicity: continuous monitoring of sperm output from vasocystotomized rats. *Toxicology* 53(2-3):219-230.
- Levins PL. 1981. Sources of toxic pollutants found in influents to sewage treatment plants: AD Little, Inc., Boston, MA.
- Li H, Cheng Y, Wang H, et al. 2003. Inhibition of nitrobenzene-induced DNA and hemoglobin adductions by dietary constituents, 291.
- Li H, Wang H, Sun H, et al. 2003. Binding of nitrobenzene to hepatic DNA and hemoglobin at low doses in mice, 25.
- Li P, Yin W, Li P, et al. 2010. Distribution and migration of nitrobenzene in water following a simulated spill. *J Hazard Mater* 182(1-3):787-791.
- Lide DR, ed. 2005. CRC Handbook of Chemistry and Physics 85th edition (Lide DR Ed.). Boca Raton, FL: CRC Press.
- Lin Y, Han X, Lu H, et al. 2013. Study of archaea community structure during the biodegradation process of nitrobenzene wastewater in an anaerobic baffled reactor. *Int Biodeterior Biodegrad* 85:499-505.
- Linch AL. 1974. Biological monitoring for industrial exposure to cyanogenic aromatic nitro and amino compounds. *J American Industrial Hygiene Association Journal* 35(7):426-432.
- Linder RE, Strader LF, Slott VL, et al. 1992. Endpoints of spermatotoxicity in the rat after short duration exposures to fourteen reproductive toxicants. *Reprod Toxicol* 6(6):491-505.
- Lioy PJ, Daisey JM, Atherholt T, et al. 1983. The New Jersey project on airborne toxic elements and organic substances (ATEOS): a summary of the 1981 summer and 1982 winter studies. *Journal of the Air Pollution Control Association* 33(7):649-657.

8. REFERENCES

- Lu P-Y, Metcalf RL. 1975. Environmental fate and biodegradability of benzene derivatives as studied in a model aquatic ecosystem. *Environ Health Perspect* 10269-284.
- Ludlow JT, Wilkerson RG, Nappe TM. 2021. Methemoglobinemia. [Updated 2021 Sep 2]. In: StatPearls [Internet]. Treasure Island, FL: StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK537317/>.
- Lutin PA, Cibulka JJ, Malaney GW. 1965. Oxidation of selected carcinogenic compounds by activated sludge. *Purdue University Engineering Extension Series* 131-145.
- Mabey WR, Smith JH, Podoll RT, et al. 1982. Aquatic fate process data for organic priority pollutants. US Environmental Protection Agency, Office of Water Regulations Standards, Washington, DC EPA 4404-81.
- Mahmood N, Khan MU, Haq IUL, et al. 2019. A case of dapsone induced methemoglobinemia. *J Pharm Policy Pract* 12:22. 10.1186/s40545-019-0185-y.
- Mallouh AA, Sarette WO. 1993. Methemoglobinemia induced by topical hair oil. *Annals of Saudi medicine* 13(1).
- Maples KR, Eyer P, Mason RP. 1990. Aniline-, phenylhydroxylamine-, nitrosobenzene-, and nitrobenzene-induced hemoglobin thiyl free radical formation in vivo and in vitro. *Mol Pharmacol* 37(2):311-318.
- Marion CV, Malaney GW. 1963. Ability of activated sludge microorganisms to oxidize aromatic organic compounds. *J Purdue Univ. Eng. Ext. Ser* 115297-308.
- Marshall JB, Ecklund RE. 1980. Methemoglobinemia from overdose of nitroglycerin. *JAMA: The Journal of the American Medical Association* 244(4):330. 10.1001/jama.1980.03310040014005.
- Martínez MA, Ballesteros S, Almarza E, et al. 2003. Acute nitrobenzene poisoning with severe associated methemoglobinemia: Identification in whole blood by GC—FID and GC-MS. *J Anal Toxicol* 27(4):221-225. 10.1093/jat/27.4.221.
- Mason RP, Holtzman JL. 1975a. Mechanism of microsomal and mitochondrial nitroreductase. Electron spin resonance evidence for nitroaromatic free radical intermediates. *Biochemistry* 14(8):1626-1632. 10.1021/bi00679a013.
- Mason RP, Holtzman JL. 1975b. The role of catalytic superoxide formation in the O₂ inhibition of nitroreductase. *Biochem Biophys Res Commun* 67(4):1267-1274. [https://doi.org/10.1016/0006-291X\(75\)90163-1](https://doi.org/10.1016/0006-291X(75)90163-1).
- Mason RP. 1982. Chapter 6 - Free-Radical Intermediates in the Metabolism of Toxic Chemicals. In: Pryor WA, ed. *Free Radicals in Biology*. Academic Press, 161-222.
- Matsumara H, Yoshida T. 1959. Experimental studies of nitrobenzol poisoning. *Kyushu J. Med. Sci* 10259.
- Mattioli F, Martelli A, Gosmar M, et al. 2006. DNA fragmentation and DNA repair synthesis induced in rat and human thyroid cells by chemicals carcinogenic to the rat thyroid. *Mutat Res* 609(2):146-153.
- McCann KG, Moomey CM, Runkle KD, et al. 2002. Chicago area methyl parathion response. *Environ Health Perspect* 110 Suppl 6(Suppl 6):1075-1078. 10.1289/ehp.02110s61075.
- McCarthy DJ, Waud WR, Struck RF, et al. 1985. Disposition and metabolism of aniline in Fischer 344 rats and C57BL/6 × C3H F₁ mice. *Cancer Res* 45(1):174-180.
- McFarlane C, Nolt C, McDowell M, et al. 1987. The uptake, distribution and metabolism of four organic chemicals by soybean plants and barley roots. *J Environ Toxicol* 6(11):847-856.
- McFarlane JC, Pfleeger T, Fletcher J. 1987. Transpiration effect on the uptake and distribution of bromacil, nitrobenzene, and phenol in soybean plants I. *Journal Of Environmental Quality* 16(4):372-376.
- McLaren TT, Foster PM, Sharpe RM. 1993a. Effect of age on seminiferous tubule protein secretion and the adverse effects of testicular toxicants in the rat. *Int J Androl* 16(6):370-379.
- McLaren TT, Foster PM, Sharpe RM. 1993b. Identification of stage-specific changes in protein secretion by isolated seminiferous tubules from the rat following exposure to either m-dinitrobenzene or nitrobenzene. *Fundam Appl Toxicol* 21(3):384-392.

8. REFERENCES

- Medinsky MA, Irons RD. 1985. Sex, Strain, and Species Differences in the Response. In: Ricker D, ed. Toxicity of Nitroaromatic Compounds. New York: Hemisphere Publishing Corporation, 35-51.
- Mestankova H, Parker AM, Bramaz N, et al. 2016. Transformation of Contaminant Candidate List (CCL3) compounds during ozonation and advanced oxidation processes in drinking water: Assessment of biological effects. *Water Res* 93:110-120.
- Miller JA. 1970. Carcinogenesis by chemicals: An overview—G. H. A. Clowes memorial lecture. *Cancer Res* 30(3):559-576.
- Mirsalis JC, Tyson CK, Butterworth BE. 1982. Detection of genotoxic carcinogens in the in vivo-in vitro hepatocyte DNA repair assay. *Environmental mutagenesis* 4(5):553-562.
- Mitsumori K, Kodama Y, Uchida O, et al. 1994. Confirmation study, using nitrobenzene, of the Combined Repeat Dose and Reproductive/Developmental Toxicity Test protocol proposed by the Organization for Economic Cooperation and Development (OECD). *J Toxicol Sci* 19(3):141-149.
- Morgan KT, Gross EA, Lyght O, et al. 1985. Morphologic and biochemical studies of a nitrobenzene-induced encephalopathy in rats. *Neurotoxicology* 6(1):105-116.
- Myslak Z, Piotrowski JK, Musialowicz E. 1971. Acute nitrobenzene poisoning. A case report with data on urinary excretion of p-nitrophenol and p-aminophenol. *J Archiv fur Toxikologie* 28(3):208-213.
- Nappe TM, Pacelli AM, Katz K. 2015. An atypical case of methemoglobinemia due to self-administered benzocaine. *Case Rep Emerg Med* 2015:670979. [10.1155/2015/670979](https://doi.org/10.1155/2015/670979).
- Nelson CR, Hites RA. 1980. Aromatic amines in and near the Buffalo River. *Environ Sci Technol* 14(9):1147-1149.
- Neumann H-G. 1988. Biomonitoring of aromatic amines and alkylating agents by measuring hemoglobin adducts. *Int Arch Occup Environ Health* 60(3):151-155. [10.1007/bf00378690](https://doi.org/10.1007/bf00378690).
- Newton JF, Kuo CH, Gemborys MW, et al. 1982. Nephrotoxicity of p-aminophenol, a metabolite of acetaminophen, in the Fischer 344 rat. *Toxicol Appl Pharmacol* 65(2):336-344. [https://doi.org/10.1016/0041-008X\(82\)90017-5](https://doi.org/10.1016/0041-008X(82)90017-5).
- NIOSH. 1977. Nitrobenzene-method S217. In: NIOSH manual of analytical methods. Vol 3. Cincinnati, OH; National Institute for Occupational Safety and Health S217-1-S217-219.
- NIOSH. 1984. Nitrobenzene-method 2005. In: NIOSH manual of analytical methods. Cincinnati, OH: National Institute for Occupational Safety and Health 2005-1-2005-2005.
- NIOSH. 1988. National occupational exposure survey. Cincinnati, OH: National Institute of Occupational Safety and Health.
- NIOSH. 2018. NIOSH pocket guide to chemical hazards. <https://www.cdc.gov/niosh/npg/npgd0271.html>.
- Nojima K, Kanno S. 1977. Studies on photochemistry of aromatic hydrocarbons. IV- Mechanism of formation of nitrophenols by the photochemical reaction of benzene and toluene with nitrogen oxides in air. *J Chemosphere* 6(6):371-376.
- Nolt CL. 1988. Uptake and translocation of six organic chemicals in a newly-designed plant exposure system and evaluation of plant uptake aspects of the prebiologic screen for ecotoxicologic effects: Cornell University, Aug.
- NTP. 1982. Repeated dose dermal toxicity test of nitrobenzene in fischer 344 rats and B6C3F1 mice. Research Triangle Park, NC: National Toxicology Program, National Institute of Environmental Health Services, Public Health Service, U.S. Department of Health and Human Services MRI-NTP 17-82-28.
- NTP. 1983a. Report on subchronic toxicity via gavage of nitrobenzene (C60082) in Fischer 344 rats and B6C3F1 mice. Worcester, MA: EG&G Mason Research Institute.
- NTP. 1983b. Report on the subchronic dermal toxicity of nitrobenzene (C60082) in Fischer 344 rats and B6C3F1 mice Research Triangle Park. National Toxicology Program, National Institute of Environmental Health Services, Public Health Service, U.S. Department of Health and Human Services, MRI-NTP 06-83-13.

8. REFERENCES

- NTP. 2016. Report on carcinogens. Research Triangle Park, NC: U.S. Department of Health and Human Services, Office of Health Assessment and Translation. <https://ntp.niehs.nih.gov/ntp/roc/content/profiles/nitrobenzene.pdf>.
- Ohkuma Y, Kawanishi S. 1999. Oxidative DNA damage by a metabolite of carcinogenic and reproductive toxic nitrobenzene in the presence of NADH and Cu(II). *Biochem Biophys Res Commun* 257(2):555-560.
- Olsson AO, Nguyen JV, Sadowski MA, et al. 2003. A liquid chromatography/electrospray ionization–tandem mass spectrometry method for quantification of specific organophosphorus pesticide biomarkers in human urine. *Anal Bioanal Chem* 376(6):808-815. 10.1007/s00216-003-1978-y.
- Parke DV. 1956. Studies in detoxication. 68. The metabolism of [14C] nitrobenzene in the rabbit and guinea pig. *Biochem J* 62(2):339.
- Patel A, Dewan A, Upadhyay K, et al. 2008. Chemically induced methemoglobinemia from acute nitrobenzene poisoning. *The Internet Journal of Laboratory Medicine* 3(2).
- Patel G, Misra A. 2011. Oral Delivery of Proteins and Peptides: Concepts and Applications. In: Misra A, ed. *Challenges in Delivery of Therapeutic Genomics and Proteomics*. London, England: Elsevier 481-529. <https://doi.org/10.1016/B978-0-12-384964-9.00010-4>.
- Patil SS, Shinde VM. 1988. Biodegradation studies of aniline and nitrobenzene in aniline plant wastewater by gas chromatography. *Environ Sci Technol* 22(10):1160-1165.
- Pellizzari ED. 1978b. Quantification of chlorinated hydrocarbons in previously collected air samples: US Environmental Protection Agency, Office of Air, Noise, and Radiation
- Perera M, Shihana F, Kularathne K, et al. 2009. Acute methaemoglobinaemia after massive nitrobenzene ingestion. *BMJ case reports* 2009bcr07.2008.0515. 10.1136/bcr.07.2008.0515.
- Perry DL, Chuang CC, Junglaus GA, et al. 1979. Identification of organic compounds in industrial effluent discharges. Athens, GA: Environmental Protection Agency.
- Piotrowski JK. 1967. Further investigations on the evaluation of exposure to nitrobenzene. *Occup Environ Med* 24(1):60-65.
- Piotrowski JK. 1977. Exposure tests for organic compounds in industrial toxicology (DHEW): National Institute for Occupational Safety and Health.
- Pitter P. 1976. Determination of biological degradability of organic substances. *Water Res* 10(3):231-235.
- Piwoni MD, Wilson JT, Walters DM, et al. 1986. Behavior of organic pollutants during rapid-infiltration of wastewater into soil: I. Processes, definition, and characterization using a microcosm. *Haz Waste Haz Mater* 3(1):43-55.
- PubChem. 2021. Compound summary. Nitrobenzene. National Library of Medicine, National Center for Biotechnology Information. <https://pubchem.ncbi.nlm.nih.gov/compound/Nitrobenzene>. November 11, 2021.
- Reddy BG, Pohl LR, Krishna G. 1976. The requirement of the gut flora in nitrobenzene-induced methemoglobinemia in rats. *Biochem Pharmacol* 25(9):1119-1122.
- Richburg JH, Nañez A. 2003. Fas- or FasL-deficient mice display an increased sensitivity to nitrobenzene-induced testicular germ cell apoptosis. *Toxicol Lett* 139(1):1-10.
- Rickert DE, Bond JA, Long RM, et al. 1983. Metabolism and excretion of nitrobenzene by rats and mice. *Toxicol Appl Pharmacol* 67(2):206-214.
- Rickert DE. 1987. Metabolism of nitroaromatic compounds. *J Drug metabolism reviews* 18(1):23-53.
- Robbiano L, Baroni D, Carrozzino R, et al. 2004. DNA damage and micronuclei induced in rat and human kidney cells by six chemicals carcinogenic to the rat kidney. *Toxicology* 204(2-3):187-195.
- Robinson D, Smith JN, Williams RT. 1951. Studies in detoxication. 40. The metabolism of nitrobenzene in the rabbit. o-, m- and p-Nitrophenols, o-, m- and p-aminophenols and 4-nitrocatechol as metabolites of nitrobenzene. *Biochem J* 50(2):228.
- Roth CM, Goss K-U, Schwarzenbach RP. 2004. Sorption of diverse organic vapors to snow. *Environ Sci Technol* 38(15): 4078-4084. <https://doi.org/10.1021/es0350684>.

8. REFERENCES

- Rubin C, Esteban E, Kieszak S, et al. 2002. Assessment of human exposure and human health effects after indoor application of methyl parathion in Lorain County, Ohio, 1995-1996. *Environ Health Perspect* 110 Suppl 6(Suppl 6):1047-1051. 10.1289/ehp.02110s61047.
- Ruth JH. 1986. Odor thresholds and irritation levels of several chemical substances: a review. *American Industrial Hygiene Association Journal* 47(3):A-142-A-151.
- Salmowa J, Piotrowski J, Neuhorn U. 1963. Evaluation of exposure to nitrobenzene: Absorption of nitrobenzene vapour through lungs and excretion of p-nitrophenol in urine. *Occup Environ Med* 20(1):41-46.
- Saxena H, Prakash Saxena A. 2010. Acute methaemoglobinaemia due to ingestion of nitrobenzene (paint solvent). *Indian J Anaesth* 54(2):160-162. 10.4103/0019-5049.63635.
- Sealy RC, Swartz HM, Olive PL. 1978. Electron spin resonance-spin trapping. Detection of superoxide formation during aerobic microsomal reduction of nitro-compounds. *Biochem Biophys Res Commun* 82(2):680-684. [https://doi.org/10.1016/0006-291X\(78\)90928-2](https://doi.org/10.1016/0006-291X(78)90928-2).
- Seip HM, Alstad J, Carlberg GE, et al. 1986. Measurement of mobility of organic compounds in soils. *Sci Total Environ* 5087-101. [https://doi.org/10.1016/0048-9697\(86\)90353-0](https://doi.org/10.1016/0048-9697(86)90353-0).
- Shackelford WM, Cline DM, Faas L, et al. 1983. An evaluation of automated spectrum matching for survey identification of wastewater components by gas chromatography—mass spectrometry. *Anal Chim Acta* 14615-27.
- Shimkin MB. 1939. Acute toxicity of mononitrobenzene in mice. *Proceedings of the Society for Experimental Biology Medicine* 42(3):844-846.
- Shinoda K, Mitsumori K, Yasuhara K, et al. 1998. Involvement of apoptosis in the rat germ cell degeneration induced by nitrobenzene. *Arch Toxicol* 72(5):296-302.
- Smith RP, Alkatis AA, Shafer PR. 1967. Chemically induced methemoglobinemias in the mouse. *Biochem Pharmacol* 16(2):317-328.
- Smyth Jr. HF, Weil CS, West JS, et al. 1969. An exploration of joint toxic action: Twenty-seven industrial chemicals intubated in rats in all possible pairs. *Toxicol Appl Pharmacol* 14(2):340-347.
- Staples CA, Werner AF, Hoogheem TJ. 1985. Assessment of priority pollutant concentrations in the United States using STORET database. *Environ Toxicol Chem* 4(2):131-142.
- Stover EL, Kincannon DF. 1983. Biological treatability of specific organic compounds found in chemical industry wastewaters. *Water Pollut Control Fed* 5797-109.
- Suganya S, Sophia D, Raj CA, et al. 2011. Amelioration of nitrobenzene-induced nephrotoxicity by the ethanol extract of the herb *Euphorbia hirta*. *Pharmacognosy research* 3(3):201-207. 10.4103/0974-8490.85009.
- Suzuki J, Koyama T, Suzuki S. 1983. Mutagenicities of mono-nitrobenzene derivatives in the presence of norharman. *Mutat Res* 120(2-3):105-110. 10.1016/0165-7992(83)90150-1.
- Suzuki J, Takahashi N, Kobayashi Y, et al. 1987. Dependence on *Salmonella typhimurium* enzymes of mutagenicities of nitrobenzene and its derivatives in the presence of rat-liver S9 and norharman. *Mutat Res* 178(2):187-193. 10.1016/0027-5107(87)90268-5.
- Tabak HH, Quave SA, Mashni CI, et al. 1981. Biodegradability studies with organic priority pollutant compounds. *J Water Pollut Control Fed* 1503-1518.
- Toker I, Yesilaras M, Tur FC, et al. 2016. Methemoglobinemia caused by dapsone overdose: Which treatment is best? *Turkish Journal of Emergency Medicine* 15(4):182-184. 10.1016/j.tjem.2014.09.002.
- Trabalka JR, Garten Jr. CT. 1982. Development of predictive models for xenobiotic bioaccumulation in terrestrial ecosystems Oak Ridge National Lab., TN (USA).
- TRI17. 2019. Toxic Chemical Release Inventory. National Toxicology Information Program: Bethesda, MD
- Tyl RW, France KA, Fisher LC, et al. 1987. Developmental toxicity evaluation of inhaled nitrobenzene in CD rats. *Appl Toxicol* 8(4):482-492.

8. REFERENCES

- Vance WA, Levin DE. 1984. Structural features of nitroaromatics that determine mutagenic activity in *Salmonella typhimurium*. *Environ Mutagen* 6(6):797-811.
- Veith GD, DeFoe DL, Bergstedt BV. 1979. Measuring and estimating the bioconcentration factor of chemicals in fish. *Journal of the Fisheries Board of Canada* 36(9):1040-1048.
- Verna L, Whysner J, Williams GM. 1996. 2-Acetylaminofluorene mechanistic data and risk assessment: DNA reactivity, enhanced cell proliferation and tumor initiation. *Pharmacol Ther* 71(1):83-105. [https://doi.org/10.1016/0163-7258\(96\)00063-0](https://doi.org/10.1016/0163-7258(96)00063-0).
- Verschuere K. 1985. Handbook of environmental data on organic chemicals. In (2 ed.): LWW.
- Von Oettingen WF. 1941. The aromatic amino and nitro compounds: Their toxicity and potential dangers: US Government Printing Office.
- Wang A, Hu C, Qu J, et al. 2008. Phototransformation of nitrobenzene in the Songhua River: kinetics and photoproduct analysis. *J Environ Sci (China)* 20(7):787-795.
- Warner HP et al. 1987. Determination of Henry's Law Constants of Selected Priority Pollutants. USEPA/600/D-87/229; NTIS PB87-212684.
- Weisburger JH, Weisburger EK. 1973. Biochemical formation and pharmacological, toxicological, and pathological properties of hydroxylamines and hydroxamic acids. *Pharmacol Rev* 25(1):1-66.
- WHO. 2003. Environmental Health Criteria 230. Nitrobenzene. Geneva, Switzerland: World Health Organization.
- WHO. 2009. Nitrobenzene in drinking-water: Background document for development of WHO Guidelines for Drinking-water Quality. Geneva, Switzerland: World Health Organization. https://www.who.int/water_sanitation_health/water-quality/guidelines/chemicals/nitrobenzene-background.pdf.
- WHO. 2017. Guidelines for drinking-water quality: fourth edition incorporating the first addendum. Geneva, Switzerland: World Health Organization. https://www.who.int/water_sanitation_health/publications/drinking-water-quality-guidelines-4-including-1st-addendum/en/.
- Wilson JT, Enfield CG, Dunlap WJ, et al. 1981. Transport and fate of selected organic pollutants in a sandy soil 1. *J Environ Qual* 10(4):501-506.
- Windholz M, Budavari S, Blumetti RF, et al. 1983. Merck index: an encyclopedia of chemicals, drugs, and biologicals: Merck.
- Wirtschafter ZT, Wolpaw R. 1944. A case of nitrobenzene poisoning. *Ann Intern Med* 21.
- Wolfe NL. 1992. Abiotic transformations of pesticides in natural waters and sediments. In: Schnoor JR, ed. Fate of pesticides and chemicals in the environment. Chichester: John Wiley and Sons
- Young DR, Gossett RW, Baird RB, et al. 1983. Wastewater inputs and marine bioaccumulation of priority pollutant organics off Southern California. Water chlorination: Environmental impact health effects 4.
- Yu YS, Bailey GW. 1992. Reduction of nitrobenzene by four sulfide minerals: Kinetics, products, and solubility. *J Environ Qual* 21(1):86-94. 10.2134/jeq1992.00472425002100010014x.
- Zasada K, Karbownik-Lewinska M. 2015. Comparison of potential protective effects of melatonin and propylthiouracil against lipid peroxidation caused by nitrobenzene in the thyroid gland. *Toxicol Ind Health* 31(12):1195-1201.
- Zepp RG, Schlotzhauer PF. 1983. Influence of algae on photolysis rates of chemicals in water. *Environ Sci Technol* 17(8):462-468.
- Zepp RG, Braun AM, Hoigne J, et al. 1987a. Photoproduction of hydrated electrons from natural organic solutes in aquatic environments. *Environmental science technology* 21(5):485-490.
- Zepp RG, Hoigne J, Bader H. 1987b. Nitrate-induced photooxidation of trace organic chemicals in water. *Environ Sci Technol* 21(5):443-450.
- Zhang H-K, Liang S-X, Liu S-J. 2007. Determination of nitrobenzene by differential pulse voltammetry and its application in wastewater analysis. *Anal Bioanal Chem* 387(4):1511-1516.
- Zhang F, Bartels MJ, Pottenger LH, et al. 2008. Quantitation of methylated hemoglobin adducts in a signature peptide from rat blood by liquid chromatography/negative electrospray ionization

8. REFERENCES

tandem mass spectrometry. *Rapid Commun Mass Spectrom* 22(10): 1455-1460.
<https://doi.org/10.1002/rcm.3530>.