

## CHAPTER 8. REFERENCES

- Abdollahi M, Mohammadirad A. 2014. Nitrophenol, 4-. In: Wexler P, ed. Encyclopedia of toxicology. 3<sup>rd</sup> ed. Oxford: Academic Press, 575-577. <http://doi.org/10.1016/B978-0-12-386454-3.01143-X>.
- Abu-Qare AW, Brownie CF, Abou-Donia MB. 2000. Placental transfer and pharmacokinetics of a single oral dose of [<sup>14</sup>C]p-nitrophenol in rats. *Arch Toxicol* 74(7):388-396. <http://doi.org/10.1007/s002040000133>.
- Adhya TK, Sudhakar B, Sethunathan N. 1981. Hydrolysis of selected organophosphorus insecticides by two bacteria isolated from flood soil. *J Appl Bacteriol* 50(1):167-172. <http://doi.org/10.1111/j.1365-2672.1981.tb00881.x>.
- Adler B, Braun R, Schöneich J, et al. 1976. Repair-defective mutants of *Proteus mirabilis* as a prescreening system for the detection of potential carcinogens. *Biol Zent Bl* 95:463-469.
- Aelion CM, Swindoll CM, Pfaender FK. 1987. Adaptation to and biodegradation of xenobiotic compounds by microbial communities from a pristine aquifer. *Appl Environ Microbiol* 53(9):2212-2217. <http://doi.org/10.1128/aem.53.9.2212-2217.1987>.
- Alexander M, Lustigman BK. 1966. Effect of chemical structure on microbial degradation of substituted benzenes. *J Agric Food Chem* 14(4):410-413. <http://doi.org/10.1021/jf60146a022>.
- Amacher DE, Turner GN. 1982. Mutagenic evaluation of carcinogens and non-carcinogens in the L5178Y/TK assay utilizing postmitochondrial fractions (S9) from normal rat liver. *Mutat Res* 97(1):49-65. [http://doi.org/10.1016/0165-1161\(82\)90019-x](http://doi.org/10.1016/0165-1161(82)90019-x).
- Ashurst JV, Wasson MN, Hauger W, et al. 2010. Pathophysiologic mechanisms, diagnosis, and management of dapsone-induced methemoglobinemia. *J Am Osteopath Assoc* 110(1):16-20. <http://doi.org/10.7556/jaoa.2010.110.1.16>.
- Atkinson R. 1986. Kinetics and mechanisms of the gas-phase reactions of the hydroxyl radical with organic compounds under atmospheric conditions. *Chem Rev* 86(1):69-201. <http://doi.org/10.1021/cr00071a004>.
- ATSDR. 1989. Decision guide for identifying substance-specific data needs related to toxicological profiles; Notice. Agency for Toxic Substances and Disease Registry. *Fed Regist* 54(174):37618-37634.
- ATSDR. 2018. Guidance for the preparation of toxicological profiles. Atlanta, GA: Agency for Toxic Substances and Disease Registry. [https://www.atsdr.cdc.gov/toxprofiles/guidance/profile\\_development\\_guidance.pdf](https://www.atsdr.cdc.gov/toxprofiles/guidance/profile_development_guidance.pdf). December 30, 2022.
- ATSDR. 2019. Full SPL data. Substance priority list (SPL) resource page. Agency for Toxic Substances and Disease Registry.
- Bannan TJ, Booth AM, Jones BT, et al. 2017. Measured saturation vapor pressures of phenolic and nitro-aromatic compounds. *Environ Sci Technol* 51(7):3922-3928. <http://doi.org/10.1021/acs.est.6b06364>.
- Barnes DG, Dourson M. 1988. Reference dose (RfD): Description and use in health risk. *Regul Toxicol Pharmacol* 8(4):471-486.
- 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):1085-1091. <http://doi.org/10.1289/ehp.02110s61085>.
- Battaglia C, Salvatori M, Maxia N, et al. 1999. Adjuvant L-arginine treatment for in-vitro fertilization in poor responder patients. *Hum Reprod* 14(7):1690-1697. <http://doi.org/10.1093/humrep/14.7.1690>.
- Battersby NS, Wilson V. 1989. Survey of the anaerobic biodegradation potential of organic chemicals in digesting sludge. *Appl Environ Microbiol* 55(2):433-439. <http://doi.org/10.1128/aem.55.2.433-439.1989>.
- Belloli R, Bolzacchini E, Clerici L, et al. 2006. Nitrophenols in air and rainwater. *Environ Eng Sci* 23(2):405-415. <http://doi.org/10.1089/ees.2006.23.405>.

## 8. REFERENCES

- Béranger R, Hardy EM, Dexet C, et al. 2018. Multiple pesticide analysis in hair samples of pregnant French women: Results from the ELFE national birth cohort. *Environ Int* 120:43-53. <http://doi.org/10.1016/j.envint.2018.07.023>.
- Béranger R, Hardy EM, Binter AC, et al. 2020. Multiple pesticides in mothers' hair samples and children's measurements at birth: Results from the French national birth cohort (ELFE). *Int J Hyg Environ Health* 223(1):22-33. <http://doi.org/10.1016/j.ijheh.2019.10.010>.
- Bingham E, Cohrssen B, Powell CH. 2001. Nitrophenols. In: *Patty's toxicology*. Vol. 4. 5<sup>th</sup> ed. New York, NY: John Wiley & Sons, 849.
- Bingham NC, Verma-Kurvari S, Parada LF, et al. 2006. Development of a steroidogenic factor 1/Cre transgenic mouse line. *Genesis* 44(9):419-424. <http://doi.org/10.1002/dvg.20231>.
- Blok J, de Morsier A, Gerike P, et al. 1985. Harmonisation of ready biodegradability tests. *Chemosphere* 14(11-12):1805-1820. [http://doi.org/10.1016/0045-6535\(85\)90123-7](http://doi.org/10.1016/0045-6535(85)90123-7).
- Bloom JC, Brandt JT. 1999. Toxic responses of the blood. In: Klassen CD, ed. *Casarett and Doull's toxicology: The basic science of poisons*. 5<sup>th</sup> ed. New York, NY: McGraw-Hill,
- Boatman RJ, Cunningham SL, Ziegler DA. 1986. A method for measuring the biodegradation of organic chemicals. *Environ Toxicol Chem* 5(3):233-243. <http://doi.org/10.1002/etc.5620050302>.
- Bojar RM, Rastegar H, Payne DD, et al. 1987. Methemoglobinemia from intravenous nitroglycerin: a word of caution. *Ann Thorac Surg* 43(3):332-334. [http://doi.org/10.1016/s0003-4975\(10\)60627-3](http://doi.org/10.1016/s0003-4975(10)60627-3).
- Bonnefoy A, Chiron S, Botta A. 2012. Environmental nitration processes enhance the mutagenic potency of aromatic compounds. *Environ Toxicol* 27(6):321-331. <http://doi.org/10.1002/tox.20644>.
- Borisover MD, Gruber ER. 1997. Specific interactions of organic compounds with soil organic carbon. *Chemosphere* 34(8):1761-1776. [http://doi.org/10.1016/s0045-6535\(97\)00032-5](http://doi.org/10.1016/s0045-6535(97)00032-5).
- Bourquin AW. 1984. Biodegradation in the estuarine-marine environments and the genetically altered microbe. *Basic Life Sci* 28:97-115. [http://doi.org/10.1007/978-1-4684-4715-6\\_7](http://doi.org/10.1007/978-1-4684-4715-6_7).
- Bourquin AW, Spain JC, Pritchard PH. 1982. Microbial degradation of xenobiotic compounds. Proceedings of the twelfth conference on environmental toxicology 3, 4, and 5 November 1981. Dayton, OH: Air Force Aerospace Medical Research Lab. 354-369. AFMRL-TR-81-149. ADA115900.
- Boutwell RK, Bosch DK. 1959. The tumor-promoting action of phenol and related compounds for mouse skin. *Cancer Res* 19(4):413-424.
- Boyd SA. 1982. Adsorption of substituted phenols by soil. *Soil Sci* 134(5):337-343.
- Boyd SA, Shelton DR, Berry D, et al. 1983. Anaerobic biodegradation of phenolic compounds in digested sludge. *Appl Environ Microbiol* 46(1):50-54. <http://doi.org/10.1128/aem.46.1.50-54.1983>.
- Branch D, Stout LD, Folk RM. 1983a. Acute dermal toxicity of p-nitrophenol to rabbits. Monsanto Company. Submitted to the U.S. Environmental Protection Agency under TSCA section 8. OTS0518155. 86-890000359.
- Branch D, Stout LD, Folk RM. 1983b. Acute oral toxicity of p-nitrophenol to rats. Monsanto Company. Submitted to the U.S. Environmental Protection Agency under TSCA section 8. OTS0518152. 86-890000358. <https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/OTS0518152.xhtml>. December 30, 2022.
- Brown KW, Donnelly KC. 1988. An estimation of the risk associated with the organic constituents of hazardous and municipal waste landfill leachates. *Haz Waste Haz Mater* 5(1):1-30. <http://doi.org/10.1089/hwm.1988.5.1>.
- Buckley JP, Kuiper JR, Bennett DH, et al. 2022. Exposure to contemporary and emerging chemicals in commerce among pregnant women in the United States: The Environmental influences on Child Health Outcome (ECHO) Program. *Environ Sci Technol* 56(10):6560-6573. <http://doi.org/10.1021/acs.est.1c08942>.
- Budavari S. 1996. m-Nitrophenol, o-Nitrophenol, p-Nitrophenol. In: *The Merck index - An encyclopedia of chemicals, drugs, and biologicals*. Whitehouse Station, NJ: Merck and Co., Inc., 1137.

## 8. REFERENCES

- Buselmaier W, Röhrborn G, Propping P. 1973. Comparative investigations on the mutagenicity of pesticides in mammalian test systems. *Mutat Res* 21(1):25-26.
- Call DJ, Brooke LT, Lu PY. 1980. Uptake, elimination, and metabolism of three phenols by fathead minnows. *Arch Environ Contam Toxicol* 9(6):699-714. <http://doi.org/10.1007/BF01055545>.
- Cameron MA. 1958. The action of nitrophenols on the metabolic rate of rats. *Br J Pharmacol* 13(1):25-29. <http://doi.org/10.1111/j.1476-5381.1958.tb00185.x>.
- CDC. 2020. National Health and Nutrition Examination Survey. 2013-2014 data documentation, codebook, and frequencies. Pyrethroids, herbicides, & organophosphorus metabolites - urine (UPHOPM\_H). Centers for Disease Control and Prevention. [https://wwwn.cdc.gov/Nchs/Nhanes/2013-2014/UPHOPM\\_H.htm](https://wwwn.cdc.gov/Nchs/Nhanes/2013-2014/UPHOPM_H.htm). September 21, 2020.
- Cecinato A, Di Palo V, Pomata D, et al. 2005. Measurement of phase-distributed nitrophenols in Rome ambient air. *Chemosphere* 59(5):679-683. <http://doi.org/10.1016/j.chemosphere.2004.10.045>.
- Chambers CW, Tabak HH, Kabler PW. 1963. Degradation of aromatic compounds by phenol-adapted bacteria. *J Water Pollut Control Fed* 35(12):1517-1528.
- Chen J, Song M, Li Y, et al. 2016. The effect of phytosterol protects rats against 4-nitrophenol-induced liver damage. *Environ Toxicol Pharmacol* 41:266-271. <http://doi.org/10.1016/j.etap.2015.12.011>.
- Chiu CW, Lee LH, Wang CY, et al. 1978. Mutagenicity of some commercially available nitro compounds for *Salmonella typhimurium*. *Mutat Res* 58(1):11-22. [http://doi.org/10.1016/0165-1218\(78\)90090-3](http://doi.org/10.1016/0165-1218(78)90090-3).
- Clewell HJ, Andersen ME. 1985. Risk assessment extrapolations and physiological modeling. *Toxicol Ind Health* 1(4):111-131. <http://doi.org/10.1177/074823378500100408>.
- 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(7):898-908.
- 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. <http://doi.org/10.2166/wst.2000.0560>.
- Delhomme O, Morville S, Millet M. 2010. Seasonal and diurnal variations of atmospheric concentrations of phenols and nitrophenols measured in the Strasbourg area, France. *Atmos Pollut Res* 1(1):16-22. <http://doi.org/10.5094/apr.2010.003>.
- 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(2):116-127. <http://doi.org/10.1002/em.2850130206>.
- Dobson KR, Stephenson M, Greenfield PF, et al. 1985. Identification and treatability of organics in oil shale retort water. *Water Res* 19(7):849-856. [http://doi.org/10.1016/0043-1354\(85\)90142-3](http://doi.org/10.1016/0043-1354(85)90142-3).
- DOE. 2018a. Table 3: Protective action criteria (PAC) rev. 29a based on applicable 60-minute AEGLs, ERPGs, or TEELs. The chemicals are listed by CASRN. June 2018. U.S. Department of Energy. [https://edms3.energy.gov/pac/docs/Revision\\_29A\\_Table3.pdf](https://edms3.energy.gov/pac/docs/Revision_29A_Table3.pdf). July 6, 2022.
- DOE. 2018b. Protective action criteria (PAC) with AEGLs, ERPGs, & TEELs: Rev. 29A, June 2018. U.S. Department of Energy. <https://edms3.energy.gov/pac/>. July 6, 2022.
- Dzengel J, Theurich J, Bahnemann DW. 1999. Formation of nitroaromatic compounds in advanced oxidation processes: Photolysis versus photocatalysis. *Environ Sci Technol* 33(2):294-300. <http://doi.org/10.1021/es980358j>.
- ECETOC. 1984. The phototransformation of chemicals in water: Results of a ring-test. Brussels, Belgium: European Chemical Industry, Ecology and Toxicology Center. Technical Report No. 12. <https://www.ecetoc.org/wp-content/uploads/2021/10/ECETOC-TR-012.pdf>. December 30, 2022.
- Eichenbaum G, Johnson M, Kirkland D, et al. 2009. Assessment of the genotoxic and carcinogenic risks of p-nitrophenol when it is present as an impurity in a drug product. *Regul Toxicol Pharmacol* 55(1):33-42. <http://doi.org/10.1016/j.yrtph.2009.05.018>.
- Ellis DD, Jone CM, Larson RA, et al. 1982. Organic constituents of mutagenic secondary effluents from wastewater treatment plants. *Arch Environ Contam Toxicol* 11(3):373-382. <http://doi.org/10.1007/BF01055214>.

## 8. REFERENCES

- EPA. 1980. Ambient water quality criteria for nitrophenols. Washington, DC: U.S. Environmental Protection Agency. EPA440580063. <https://www.epa.gov/sites/default/files/2019-03/documents/ambient-wqc-nitrophenols-1980.pdf>. January 3, 2023.
- EPA. 1981a. Treatability manual. Volume. 1. Treatability data. Washington, DC: U.S. Environmental Protection Agency. 1.8.6-3, 1.8.7-3. EPA600282001a. <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=30005R3P.txt>. January 3, 2023.
- EPA. 1981b. Engineering handbook for hazardous waste incineration. Washington, DC: U.S. Environmental Protection Agency. SW889. <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=2000KAVZ.txt>. January 3, 2023.
- EPA. 1984. Method 625: Base/ neutrals and acids. Appendix A to Part 136: Methods for organic chemical analysis of municipal and industrial wastewater. U.S. Environmental Protection Agency.
- EPA. 1985a. Health and environmental effects profile for nitrophenols. Final draft. Cincinnati, OH: U.S. Environmental Protection Agency. PB88180450.
- EPA. 1985b. Chemical composition of drum samples from hazardous waste sites. Denver, CO: U.S. Environmental Protection Agency. EPA331R85001. <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=9101XQVV.txt>.
- EPA. 1990a. Data evaluation record: In vitro cytogenetic testing on 4-nitrophenol employing the chromosome aberration assay in Chinese hamster ovary cells, MRID number: 422709-01. U.S. Environmental Protection Agency.
- EPA. 1990b. Data evaluation record: In vitro mutagenicity tests on p-nitrophenol and ClC4 employing the Salmonella/Ames assay test system, MRID number: 421748-01. U.S. Environmental Protection Agency. 42174801.
- EPA. 1990c. Data evaluation record: L5178Y TK+/- mouse lymphoma mutagenesis assay, MRID number: 422710-01. U.S. Environmental Protection Agency.
- EPA. 1991. Alpha 2u-globulin: Association with chemically induced renal toxicity and neoplasia in the male rat. Washington, DC: U.S. Environmental Protection Agency. EPA625391019F. <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=3000480X.txt>. November 3, 2022.
- EPA. 1992a. Data evaluation record: Effect of paranitrophenol on the embryonic development of rats, MRID 42788601. U.S. Environmental Protection Agency.
- EPA. 1992b. Data evaluation record: Primary eye irritation of paranitrophenol in rabbits, MRID No: 425398-01. U.S. Environmental Protection Agency.
- EPA. 1998. Method 8270D: Semivolatile organic compounds by gas chromatography/mass spectrometry (GC/MS). U.S. Environmental Protection Agency.
- EPA. 2000a. Method 528: Determination of phenols in drinking water by solid phase extraction and capillary column gas chromatography/mass spectrometry (GC/MS). U.S. Environmental Protection Agency. [https://cfpub.epa.gov/si/si\\_public\\_file\\_download.cfm?p\\_download\\_id=525081&Lab=NERL](https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=525081&Lab=NERL). January 3, 2023.
- EPA. 2000b. R.E.D. facts: Ethyl parathion. U.S. Environmental Protection Agency. EPA738F00009. [https://www3.epa.gov/pesticides/chem\\_search/reg\\_actions/reregistration/fs\\_PC-057501\\_1-Sep-00.pdf](https://www3.epa.gov/pesticides/chem_search/reg_actions/reregistration/fs_PC-057501_1-Sep-00.pdf). November 7, 2022.
- 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. EPA260B05001. [https://ordspub.epa.gov/ords/guideme\\_ext/guideme\\_ext/guideme/file/ry\\_2019\\_rfi.pdf](https://ordspub.epa.gov/ords/guideme_ext/guideme_ext/guideme/file/ry_2019_rfi.pdf). January 3, 2023.
- EPA. 2007a. Method 8041A: Phenols by gas chromatography. U.S. Environmental Protection Agency. <https://www.epa.gov/sites/default/files/2015-12/documents/8041a.pdf>. January 3, 2023.

## 8. REFERENCES

- EPA. 2007b. Provisional peer reviewed toxicity values for 2-nitrophenol (CASRN 88-75-5). Cincinnati, OH: U.S. Environmental Protection Agency. EPA690R07023F.  
<https://cfpub.epa.gov/ncea/pprtv/documents/Nitrophenol2.pdf>. November 7, 2022.
- EPA. 2009a. Toxicological review of nitrobenzene (CAS No. 98-95-3) Washington, DC: U.S. Environmental Protection Agency. EPA635R08004F.  
[https://cfpub.epa.gov/ncea/iris/iris\\_documents/documents/toxreviews/0079tr.pdf](https://cfpub.epa.gov/ncea/iris/iris_documents/documents/toxreviews/0079tr.pdf). November 7, 2022.
- EPA. 2009b. National primary drinking water regulations. Washington, DC: U.S. Environmental Protection Agency. EPA816F09004. [https://www.epa.gov/sites/production/files/2016-06/documents/npwdr\\_complete\\_table.pdf](https://www.epa.gov/sites/production/files/2016-06/documents/npwdr_complete_table.pdf). August 2, 2019.
- EPA. 2016. 2016 Chemical data reporting results. U.S. Environmental Protection Agency.  
<https://www.epa.gov/chemical-data-reporting/access-cdr-data>. December 15, 2020.
- EPA. 2017. National emission inventory (NEI) data. U.S. Environmental Protection Agency.  
<https://www.epa.gov/air-emissions-inventories/2017-national-emissions-inventory-nei-data>. October 20, 2022.
- EPA. 2018a. Compiled AEGL values. U.S. Environmental Protection Agency.  
[https://www.epa.gov/sites/production/files/2018-08/documents/compiled\\_aegls\\_update\\_27jul2018.pdf](https://www.epa.gov/sites/production/files/2018-08/documents/compiled_aegls_update_27jul2018.pdf). April 12, 2020.
- EPA. 2018b. 2018 edition of the drinking water standards and health advisories tables. Washington, DC: U.S. Environmental Protection Agency. EPA822F18001.  
<https://www.epa.gov/system/files/documents/2022-01/dwtable2018.pdf>. January 3, 2023.
- EPA. 2020a. Electroplating point source category. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 413. <https://www.ecfr.gov/cgi-bin/text-idx?SID=9b2ad535d533c8e67ed84ba64ff900de&mc=true&node=pt40.31.413&rgn=div5>. December 18, 2020.
- EPA. 2020b. Electrical and electronic components point source category. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 469. <https://www.ecfr.gov/cgi-bin/text-idx?SID=9b2ad535d533c8e67ed84ba64ff900de&mc=true&node=pt40.32.469&rgn=div5>. December 18, 2020.
- Fazzalari FA. 1978. Compilation of odor and taste threshold values data. In: ASTM Data Series DS 48A (Committee E-18). Philadelphia, PA: American Society for Testing and Materials,
- FDA. 2006. 2004-2005 Summary of pesticide residues and industrial chemicals found in TDS foods - sorted by pesticide/chemical. Food and Drug Administration.  
<https://www.fda.gov/media/83172/download>. October 26, 2020.
- FDA. 2022. Substances added to food. U.S. Food and Drug Administration.  
<https://www.cfsanappexternal.fda.gov/scripts/fdcc/?set=FoodSubstances>. January 24, 2022.
- Fenske RA, Lu C, Barr D, et al. 2002. Children's exposure to chlorpyrifos and parathion in an agricultural community in central Washington State. Environ Health Perspect 110(5):549-553.  
<http://doi.org/10.1289/ehp.02110549>.
- Fernández SF, Pardo O, Adam-Cervera I, et al. 2020. Biomonitoring of non-persistent pesticides in urine from lactating mothers: Exposure and risk assessment. Sci Total Environ 699:134385.  
<http://doi.org/10.1016/j.scitotenv.2019.134385>.
- Figge K, Klahn J, Koch J. 1983. Testing of chemicals by evaluation of their distribution and degradation patterns in an environmental standard system. Regul Toxicol Pharmacol 3(3):199-215.  
[http://doi.org/10.1016/0273-2300\(83\)90028-4](http://doi.org/10.1016/0273-2300(83)90028-4).
- Freitag D, Geyer H, Kraus A, et al. 1982. Ecotoxicological profile analysis. VII. Screening chemicals for their environmental behavior by comparative evaluation. Ecotoxicol Environ Saf 6(1):60-81.  
[http://doi.org/10.1016/0147-6513\(82\)90081-1](http://doi.org/10.1016/0147-6513(82)90081-1).
- Garrett NE, Lewtas J. 1983. Cellular toxicity in Chinese hamster ovary cell cultures. I. Analysis of cytotoxicity endpoints for twenty-nine priority pollutants. Environ Res 32(2):455-465.  
[http://doi.org/10.1016/0013-9351\(83\)90125-1](http://doi.org/10.1016/0013-9351(83)90125-1).

## 8. REFERENCES

- Gawlik BM, Feicht EA, Karcher W, et al. 1998. Application of the European reference soil set (EUROSOILS) to a HPLC-screening method for the estimation of soil adsorption coefficients of organic compounds. *Chemosphere* 36(14):2903-2919. [http://doi.org/10.1016/s0045-6535\(97\)10247-8](http://doi.org/10.1016/s0045-6535(97)10247-8).
- Gerike P, Fischer WK. 1979. A correlation study of biodegradability determinations with various chemicals in various tests. *Ecotoxicol Environ Saf* 3(2):159-173. [http://doi.org/10.1016/0147-6513\(79\)90009-5](http://doi.org/10.1016/0147-6513(79)90009-5).
- Geyer H, Politzki G, Freitag D. 1984. Prediction of ecotoxicological behaviour of chemicals: Relationship between n-octanol/water partition coefficient and bioaccumulation of organic chemicals by alga Chlorella. *Chemosphere* 13(2):269-284.
- Grant CM. 1959. The action of nitrophenols on the pulmonary ventilation of rats. *Br J Pharmacol* 14:401-403. <http://doi.org/10.1111/j.1476-5381.1959.tb00265.x>.
- Güsten H, Klasinc L, Marić D. 1984. Prediction of the abiotic degradability of organic compounds in the troposphere. *J Atmos Chem* 2(1):83-93. <http://doi.org/10.1007/BF00127264>.
- Haller HD. 1978. Degradation of mono-substituted benzoates and phenols by wastewater. *J Water Pollut Control Fed* 50(12):2771-2777.
- Hansch C, Leo A, Hoekman D. 1995. o-Nitrophenol and p-nitrophenol. In: Exploring QSAR - Hydrophobic, electronic, and steric constants. Washington, DC: American Chemical Society, 18.
- Harrison MAJ, Cape JN, Heal MR. 2002. Experimentally determined Henry's Law coefficients of phenol, 2-methylphenol and 2-nitrophenol in the temperature range 281–302K. *Atmos Environ* 36(11):1843-1851. [http://doi.org/10.1016/s1352-2310\(02\)00137-1](http://doi.org/10.1016/s1352-2310(02)00137-1).
- Harrison MAJ, Barra S, Borghesi D, et al. 2005. Nitrated phenols in the atmosphere: a review. *Atmos Environ* 39(2):231-248. <http://doi.org/10.1016/j.atmosenv.2004.09.044>.
- Hartmann A, Speit G. 1997. The contribution of cytotoxicity to DNA-effects in the single cell gel test (comet assay). *Toxicol Lett* 90(2-3):183-188. [http://doi.org/10.1016/s0378-4274\(96\)03847-7](http://doi.org/10.1016/s0378-4274(96)03847-7).
- Hattori M, Tabata S. 2006. Nitric oxide and ovarian function. *Anim Sci J* 77(3):275-284. <http://doi.org/10.1111/j.1740-0929.2006.00349.x>.
- Hauser TR, Bromberg SM. 1982. EPA's monitoring program at Love Canal 1980. *Environ Monit Assess* 2(3):249-271. <http://doi.org/10.1007/BF00394456>.
- Haworth S, Lawlor T, Mortelmans K, et al. 1983. Salmonella mutagenicity test results for 250 chemicals. *Environ Mutagen* 5 Suppl 1:1-142. <http://doi.org/10.1002/em.2860050703>.
- Haynes WM, Lide DR, Bruno TJ. 2015. Physical constants of organic compounds. In: CRC handbook of chemistry and physics. 95<sup>th</sup> ed. Boca Raton, FL: CRC Press Inc., 3-414.
- Hazleton. 1983. Subacute dust inhalation toxicity study in rats with p-nitrophenol (final report) with attachments and cover letter dated 060889. Monsanto Chemical Company. Submitted to the U.S. Environmental Protection Agency under TSCA section 8. OTS0520433. 86-890000362. HLA study no. 82-242.
- Hazleton. 1984. Initial submission: Subacute inhalation toxicity study in rats with o-nitrophenol with cover letter dated 080792. Monsanto Chemical Company. Submitted to the U.S. Environmental Protection Agency under TSCA section 8E. 88-920007617. OTS0545809. 88-920007617. 8EHQ-0892-9294.
- Hazleton. 1989. Subchronic toxicity study in rats with paranitrophenol (final report) with cover letter. Monsanto Chemical Company. Submitted to the U.S. Environmental Protection Agency under TSCA section 4. OTS0526338. 40-8915314. 42088A H1-37. <https://ntris.ntis.gov/NTRL/dashboard/searchResults/titleDetail/OTS0526338.xhtml>. January 3, 2023.
- Heimbuch JA, Wilhelmi AR. 1985. Wet air oxidation - A treatment means for aqueous hazardous waste streams. *J Hazard Mater* 12(2):187-200. [http://doi.org/10.1016/0304-3894\(85\)85006-8](http://doi.org/10.1016/0304-3894(85)85006-8).
- Ho YL, Ho SK. 1981. Screening of carcinogens with the prophage lambda cIts857 induction test. *Cancer Res* 41(2):532-536.

## 8. REFERENCES

- Hodson J, Williams NA. 1988. The estimation of the adsorption coefficient (Koc) for soils by high performance liquid chromatography. *Chemosphere* 17(1):67-77. [http://doi.org/10.1016/0045-6535\(88\)90045-8](http://doi.org/10.1016/0045-6535(88)90045-8).
- Hollman PCH, Hertog MGL, Katan MB. 1996. Analysis and health effects of flavonoids. *Food Chem* 57(1):43-46. [http://doi.org/10.1016/0308-8146\(96\)00065-9](http://doi.org/10.1016/0308-8146(96)00065-9).
- Hoover DG, Borgonovi GE, Jones SH, et al. 1986. Anomalies in mineralization of low concentrations of organic compounds in lake water and sewage. *Appl Environ Microbiol* 51(2):226-232. <http://doi.org/10.1128/aem.51.2.226-232.1986>.
- Horowitz A, Shelton DR, Cornell CP, et al. 1982. Anaerobic degradation of aromatic compounds in sediment and digested sludge. *Develop Ind Microbiol* 23:435-444.
- Hughes MF, Hall LL. 1997. In vivo disposition of p-substituted phenols in the young rat after intraperitoneal and dermal administration. *Food Chem Toxicol* 35(7):697-704. [http://doi.org/10.1016/s0278-6915\(97\)00035-5](http://doi.org/10.1016/s0278-6915(97)00035-5).
- Hustert K, Mansour M, Parlar H. 1981. [The EPA test: A method to determine the photochemical degradation of organic compounds in aqueous systems]. *Chemosphere* 10:995-998. (German)
- IARC. 2022. Agents classified by the IARC Monographs, volumes 1-132. International Agency for Research on Cancer. <https://monographs.iarc.fr/list-of-classifications>. October 26, 2022.
- Iglesias-González A, Schaeffer C, Dahm G, et al. 2021. Comprehensive assessment of local population chemical exposome by combination of organic pollutant- and metal-multi-residue analysis in hair. *Exposure and Health* 14(3):685-712. <http://doi.org/10.1007/s12403-021-00444-2>.
- Ingerslev F, Nyholm N. 2000. Shake-flask test for determination of biodegradation rates of (14)C-labeled chemicals at low concentrations in surface water systems. *Ecotoxicol Environ Saf* 45(3):274-283. <http://doi.org/10.1006/eesa.1999.1877>.
- Inomata S, Fushimi A, Sato K, et al. 2015. 4-Nitrophenol, 1-nitropyrene, and 9-nitroanthracene emissions in exhaust particles from diesel vehicles with different exhaust gas treatments. *Atmos Environ* 110:93-102. <http://doi.org/10.1016/j.atmosenv.2015.03.043>.
- Inomata S, Yamada H, Tanimoto H. 2016. Investigation on VOC emissions from automobile sources by means of online mass spectrometry. *Curr Pollut Rep* 2(3):188-199. <http://doi.org/10.1007/s40726-016-0032-6>.
- IRIS. 2002. Chemical assessment summary: p-Nitrophenol; CASRN 100-02-7. Integrated Risk Information System. Washington, DC: U.S. Environmental Protection Agency. [https://iris.epa.gov/static/pdfs/0360\\_summary.pdf](https://iris.epa.gov/static/pdfs/0360_summary.pdf). October 17, 2022.
- Isnard P, Lambert S. 1988. Estimating bioconcentration factors from octanol-water partition coefficient and aqueous solubility. *Chemosphere* 17(1):21-34. [http://doi.org/10.1016/0045-6535\(88\)90040-9](http://doi.org/10.1016/0045-6535(88)90040-9).
- Jones SH, Alexander M. 1986. Kinetics of mineralization of phenols in lake water. *Appl Environ Microbiol* 51(5):891-897. <http://doi.org/10.1128/aem.51.5.891-897.1986>.
- Jones SH, Alexander M. 1988. Effect of inorganic nutrients on the acclimation period preceding mineralization of organic chemicals in lake water. *Appl Environ Microbiol* 54(12):3177-3179. <http://doi.org/10.1128/aem.54.12.3177-3179.1988>.
- Kavlock RJ. 1990. Structure-activity relationships in the developmental toxicity of substituted phenols: in vivo effects. *Teratology* 41(1):43-59. <http://doi.org/10.1002/tera.1420410106>.
- Kincannon DF, Esfandi A. 1981. Performance comparison of activated sludge, PAC activated sludge, granular activated carbon and a resin column for removing priority pollutants from a pharmaceutical wastewater. In: Proceedings of the 35<sup>th</sup> Industrial Waste Conference, May 13, 14 and 15, 1980, Purdue University Lafayette, Indiana. Ann Arbor, MI: Ann Arbor Science, 476-483.
- Kincannon DF, Lin YS. 1985. Microbial degradation of hazardous wastes by land treatment. In: Proceedings of the 40th Industrial Waste Conference, May 14, 15, 16, 1985, Purdue University, West Lafayette, Indiana. Boston, MA: Butterworths, 607-620.
- 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. *J Expo Anal Environ Epidemiol* 15(2):164-171. <http://doi.org/10.1038/sj.jea.7500384>.

## 8. REFERENCES

- Kitanovski Z, Hovorka J, Kuta J, et al. 2020. Nitrated monoaromatic hydrocarbons (nitrophenols, nitrocatechols, nitrosalicylic acids) in ambient air: levels, mass size distributions and inhalation bioaccessibility. *Environ Sci Pollut Res Int* 28(42):59131-59140. <http://doi.org/10.1007/s11356-020-09540-3>.
- Klán P, Holoubek I. 2002. Ice (photo)chemistry. Ice as a medium for long-term (photo)chemical transformations--environmental implications. *Chemosphere* 46(8):1201-1210. [http://doi.org/10.1016/s0045-6535\(01\)00285-5](http://doi.org/10.1016/s0045-6535(01)00285-5).
- Koizumi M, Yamamoto Y, Ito Y, et al. 2001. Comparative study of toxicity of 4-nitrophenol and 2,4-dinitrophenol in newborn and young rats. *J Toxicol Sci* 26(5):299-311. <http://doi.org/10.2131/jts.26.299>.
- Kool HJ. 1984. Influence of microbial biomass on the biodegradability of organic compounds. *Chemosphere* 13(7):751-761. [http://doi.org/10.1016/0045-6535\(84\)90178-4](http://doi.org/10.1016/0045-6535(84)90178-4).
- Korte F, Klein W. 1982. Degradation of benzene in the environment. *Ecotoxicol Environ Saf* 6(4):311-327. [http://doi.org/10.1016/0147-6513\(82\)90046-x](http://doi.org/10.1016/0147-6513(82)90046-x).
- Kotzias D, Herrmann M, Zsolnay A, et al. 1986. Photochemical reactivity of humic materials. *Naturwissenschaften* 73(1):35-36. <http://doi.org/10.1007/BF01168804>.
- Krishnan K, Clewell HJ, Andersen ME. 1994. Physiologically based pharmacokinetic analyses of simple mixtures. *Environ Health Perspect* 102(Suppl 9):151-155. <http://doi.org/10.1289/ehp.94102s9151>.
- 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. <http://doi.org/10.4103/0971-4065.134681>.
- Laughlin KA, Schardein JL, Blair M. 1983. Range-finding teratology study in rats with cover letter and summary. International Research and Development Corporation. Monsanto Company. Submitted to the U.S. Environmental Protection Agency under TSCA section 8E. IR-83-100. OTS0526380. 88-900000151. 8EHQ-0590-0978.
- Lawford DJ, King E, Harvey DG. 1954. On the metabolism of some aromatic nitro-compounds by different species of animal. II. The elimination of various nitro-compounds from the blood of different species of animal. *J Pharm Pharmacol* 6(9):619-624. <http://doi.org/10.1111/j.2042-7158.1954.tb10995.x>.
- Lemaire J, Guth JA, Klais O, et al. 1985. Ring test of a method for assessing the phototransformation of chemicals in water. *Chemosphere* 14(1):53-77. [http://doi.org/10.1016/0045-6535\(85\)90041-4](http://doi.org/10.1016/0045-6535(85)90041-4).
- Leuenberger C, Ligocki MP, Pankow JF. 1985. Trace organic compounds in rain. 4. Identities, concentrations, and scavenging mechanisms for phenols in urban air and rain. *Environ Sci Technol* 19(11):1053-1058. <http://doi.org/10.1021/es00141a005>.
- Leuenberger C, Czuczwa J, Trempl J, et al. 1988. Nitrated phenols in rain: Atmospheric occurrence of phytotoxic pollutants. *Chemosphere* 17(3):511-515. [http://doi.org/10.1016/0045-6535\(88\)90026-4](http://doi.org/10.1016/0045-6535(88)90026-4).
- Lewis RJ. 2007. [m-Nitrophenol, o-nitrophenol, p-nitrophenol]. In: Hawley's condensed chemical dictionary. 15<sup>th</sup> ed. New York, NY: John Wiley & Sons, Inc., 898-899.
- Li AJ, Kannan K. 2018. Urinary concentrations and profiles of organophosphate and pyrethroid pesticide metabolites and phenoxyacid herbicides in populations in eight countries. *Environ Int* 121(Pt 2):1148-1154. <http://doi.org/10.1016/j.envint.2018.10.033>.
- Li C, Taneda S, Suzuki AK, et al. 2006. Estrogenic and anti-androgenic activities of 4-nitrophenol in diesel exhaust particles. *Toxicol Appl Pharmacol* 217(1):1-6. <http://doi.org/10.1016/j.taap.2006.06.010>.
- Li R, Song M, Li Z, et al. 2017. 4-Nitrophenol exposure alters the AhR signaling pathway and related gene expression in the rat liver. *J Appl Toxicol* 37(2):150-158. <http://doi.org/10.1002/jat.3332>.
- Li Y, Wang X, Toms LL, et al. 2019. Pesticide metabolite concentrations in Queensland pre-schoolers - Exposure trends related to age and sex using urinary biomarkers. *Environ Res* 176:108532. <http://doi.org/10.1016/j.envres.2019.108532>.
- Li M, Wang X, Lu C, et al. 2020. Nitrated phenols and the phenolic precursors in the atmosphere in urban Jinan, China. *Sci Total Environ* 714:136760. <http://doi.org/10.1016/j.scitotenv.2020.136760>.

## 8. REFERENCES

- Loehr RC, Krishnamoorthy R. 1988. Terrestrial bioaccumulation potential of phenolic compounds. *Haz Waste Haz Mater* 5:109-128. <http://doi.org/10.1089/hwm.1988.5.109>.
- Løkke H. 1985. Degradation of 4-nitrophenol in two Danish soils. *Environ Pollut Ser A Ecol Biol* 38(2):171-181. [http://doi.org/10.1016/0143-1471\(85\)90075-3](http://doi.org/10.1016/0143-1471(85)90075-3).
- López-Gálvez N, Wagoner R, Beamer P, et al. 2018. Migrant farmworkers' exposure to pesticides in Sonora, Mexico. *Int J Environ Res Public Health* 15(12) <http://doi.org/10.3390/ijerph15122651>.
- Lu C, Wang X, Dong S, et al. 2019. Emissions of fine particulate nitrated phenols from various on-road vehicles in China. *Environ Res* 179(Pt A):108709. <http://doi.org/10.1016/j.envres.2019.108709>.
- Machida M, Morita Y, Hayashi M, et al. 1982. Pharmacokinetic evidence for the occurrence of extrahepatic conjugative metabolism of p-nitrophenol in rats. *Biochem Pharmacol* 31(5):787-791. [http://doi.org/10.1016/0006-2952\(82\)90464-6](http://doi.org/10.1016/0006-2952(82)90464-6).
- Mahmood N, Khan MU, Haq IUL, et al. 2019. A case of dapsone induced methemoglobinemia. *J Pharm Policy Pract* 12:22. <http://doi.org/10.1186/s40545-019-0185-y>.
- Marshall JB, Ecklund RE. 1980. Methemoglobinemia from overdose of nitroglycerin. *JAMA* 244(4):330. <http://doi.org/10.1001/jama.1980.03310040014005>.
- McCormick NG, Feeherry FE, Levinson HS. 1976. Microbial transformation of 2,4,6-trinitrotoluene and other nitroaromatic compounds. *Appl Environ Microbiol* 31(6):949-958. <http://doi.org/10.1128/aem.31.6.949-958.1976>.
- Means JL, Anderson SJ. 1981. Comparison of five different methods for measuring biodegradability in aqueous environments. *Water Air Soil Pollut* 16(3):301-315. <http://doi.org/10.1007/BF01046911>.
- Meerman JH, Nijland C, Mulder GJ. 1987. Sex differences in sulfation and glucuronidation of phenol, 4-nitrophenol and N-hydroxy-2-acetylaminofluorene in the rat in vivo. *Biochem Pharmacol* 36(16):2605-2608. [http://doi.org/10.1016/0006-2952\(87\)90538-7](http://doi.org/10.1016/0006-2952(87)90538-7).
- Mi Y, Tu L, Wang H, et al. 2013. Supplementation with quercetin attenuates 4-nitrophenol-induced testicular toxicity in adult male mice. *Anat Rec* 296(10):1650-1657. <http://doi.org/10.1002/ar.22765>.
- Monsanto. 1983a. Primary eye irritation of p-nitrophenol to rabbits with attachments and cover letter date 060889. Monsanto Company. Submitted to the U.S. Environmental Protection Agency under TSCA Section 8D. OTS0518154. 86-890000360.
- Monsanto. 1983b. Primary skin irritation of p-nitrophenol to rabbits with attachments and cover letter date 060889. Monsanto Company. Submitted to the U.S. Environmental Protection Agency under TSCA Section 8D. OTS0518155. 86-890000361.
- Monsanto. 1984. Primary skin irritancy and Department of Transportation (DOT) skin corrosivity test of p-nitrophenol in rabbits with attachments and cover letter dated 060889. Monsanto Company. Submitted to the U.S. Environmental Protection Agency under TSCA Section 8D. OTS0518156. 86-890000363. <https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/OTS0518156.xhtml>. October 21, 2022.
- Naoum PC. 2012. Methemoglobinemia in children: how to explain the results? *Rev Bras Hematol Hemoter* 34(1):5. <http://doi.org/10.5581/1516-8484.20120003>.
- Nappe TM, Pacelli AM, Katz K. 2015. An atypical case of methemoglobinemia due to self-administered benzocaine. *Case Rep Emerg Med* 2015:670979. <http://doi.org/10.1155/2015/670979>.
- NAS/NRC. 1989. Biologic markers in reproductive toxicology. Washington, DC: National Academy Press. 15-35. <https://www.ncbi.nlm.nih.gov/books/NBK218931/>. January 3, 2023.
- Neujahr HY, Lindsjo S, Varga JM. 1974. Oxidation of phenols by cells and cell-free enzymes from *Candida tropicalis*. *Antonie Van Leeuwenhoek* 40(2):209-216. <http://doi.org/10.1007/BF00394378>.
- NIOSH. 2018. Index of CAS no. In: NIOSH pocket guide to chemical hazards. National Institute for Occupational Safety and Health, <https://www.cdc.gov/niosh/npg/npgdcas.html>. September 28, 2020.
- NLM. 2022a. Compound summary: 2-Nitrophenol. PubChem. U.S. National Library of Medicine. <https://pubchem.ncbi.nlm.nih.gov/compound/2-Nitrophenol>. November 3, 2022.

## 8. REFERENCES

- NLM. 2022b. Compound summary: 3-Nitrophenol. PubChem. U.S. National Library of Medicine: <https://pubchem.ncbi.nlm.nih.gov/compound/3-Nitrophenol>. November 3, 2022.
- NLM. 2022c. Compound summary: 4-Nitrophenol. PubChem. U.S. National Library of Medicine. <https://pubchem.ncbi.nlm.nih.gov/compound/4-Nitrophenol>. November 3, 2022.
- Nojima K, Ikarigawa T, Kanno S. 1980. Studies on photochemistry of aromatic hydrocarbons VI. Chemosphere 9(7-8):421-436. [http://doi.org/10.1016/0045-6535\(80\)90026-0](http://doi.org/10.1016/0045-6535(80)90026-0).
- Nojima K, Fukaya K, Fukui S, et al. 1976. Studies on photochemistry of aromatic hydrocarbons III. Chemosphere 5(1):25-30. [http://doi.org/10.1016/0045-6535\(76\)90052-7](http://doi.org/10.1016/0045-6535(76)90052-7).
- Nojima K, Kawaguchi A, Ohya T, et al. 1983. Studies on photochemical reaction of air pollutants. X. Identification of nitrophenols in suspended particulates. Chem Pharm Bull (Tokyo) 31(3):1047-1051. <http://doi.org/10.1248/cpb.31.1047>.
- NTP. 1993. Toxicology and carcinogenesis studies of p-nitrophenol (CAS no. 100-02-7) in Swiss-Webster mice (dermal studies). National Toxicology Program. NTP TR 417. NIH Publ No. 93-3148. [https://ntp.niehs.nih.gov/publications/reports/tr/400s/tr417/index.html?utm\\_source=direct&utm\\_medium=prod&utm\\_campaign=nptpgolinks&utm\\_term=tr417abs](https://ntp.niehs.nih.gov/publications/reports/tr/400s/tr417/index.html?utm_source=direct&utm_medium=prod&utm_campaign=nptpgolinks&utm_term=tr417abs). January 3, 2023.
- NTP. 2013. Draft OHAT approach for systematic review and evidence integration for literature-based health assessments - February 2013. National Toxicology Program. [https://ntp.niehs.nih.gov/ntp/ohat/evaluationprocess/draftohatapproach\\_february2013.pdf](https://ntp.niehs.nih.gov/ntp/ohat/evaluationprocess/draftohatapproach_february2013.pdf). January 3, 2023.
- NTP. 2015a. OHAT risk of bias rating tool for human and animal studies. National Toxicology Program. [https://ntp.niehs.nih.gov/ntp/ohat/pubs/riskofbiastool\\_508.pdf](https://ntp.niehs.nih.gov/ntp/ohat/pubs/riskofbiastool_508.pdf). January 3, 2023.
- NTP. 2015b. Handbook for conducting a literature-based health assessment using OHAT approach for systematic review and evidence integration. National Toxicology Program. [https://ntp.niehs.nih.gov/ntp/ohat/pubs/handbookjan2015\\_508.pdf](https://ntp.niehs.nih.gov/ntp/ohat/pubs/handbookjan2015_508.pdf). January 3, 2023.
- NTP. 2021. CASRN index. In: Report on carcinogens. 15<sup>th</sup> ed. National Toxicology Program, <https://ntp.niehs.nih.gov/pubhealth/roc/index-1.html#P>. January 10, 2022.
- Oberly TJ, Bewsey BJ, Probst GS. 1984. An evaluation of the L5178Y TK+/- mouse lymphoma forward mutation assay using 42 chemicals. Mutat Res 125(2):291-306. [http://doi.org/10.1016/0027-5107\(84\)90079-4](http://doi.org/10.1016/0027-5107(84)90079-4).
- OHM/TADS. 1989. Oil and hazardous materials - Technical assistance data system. Washington, DC: U.S. Environmental Protection Agency.
- O'Neil MJ. 2006. m-Nitrophenol, o-nitrophenol, p-nitrophenol. In: The Merck index - An encyclopedia of chemicals, drugs, and biologicals. Whitehouse Station, NJ: Merck and Co., Inc, 1145.
- OSHA. 2021a. Occupational safety and health standards. Subpart Z - Toxic and hazardous substances. Air contaminants. Table Z-1: Limits for air contaminants. Occupational Safety and Health Administration. Code of Federal Regulations. 29 CFR 1910.1000. <https://www.govinfo.gov/content/pkg/CFR-2021-title29-vol6/pdf/CFR-2021-title29-vol6-sec1910-1000.pdf>. August 28, 2022.
- OSHA. 2021b. Occupational safety and health standards for shipyard employment. Subpart Z - Toxic and hazardous substances. Air contaminants. Occupational Safety and Health Administration. Code of Federal Regulations. 29 CFR 1915.1000. <https://www.govinfo.gov/content/pkg/CFR-2021-title29-vol7/pdf/CFR-2021-title29-vol7-sec1915-1000.pdf>. August 28, 2022.
- OSHA. 2021c. Safety and health regulations for construction. Subpart D - Occupational health and environment controls. Gases, vapors, fumes, dusts, and mists. Occupational Safety and Health Administration. Code of Federal Regulations. 29 CFR 1926.55. <https://www.govinfo.gov/content/pkg/CFR-2021-title29-vol8/pdf/CFR-2021-title29-vol8-sec1926-55.pdf>. August 28, 2022.
- Özel MZ, Hamilton JF, Lewis AC. 2011. New sensitive and quantitative analysis method for organic nitrogen compounds in urban aerosol samples. Environ Sci Technol 45(4):1497-1505. <http://doi.org/10.1021/es102528g>.

## 8. REFERENCES

- Paris DF, Wolfe NL, Steen WC, et al. 1983. Effect of phenol molecular structure on bacterial transformation rate constants in pond and river samples. *Appl Environ Microbiol* 45(3):1153-1155. <http://doi.org/10.1128/aem.45.3.1153-1155.1983>.
- Patterson JW, Kodukala PS. 1981. Biodegradation of hazardous organic pollutants. *Chem Eng Prog* 77:48-55.
- Percy MJ, Lappin TR. 2008. Recessive congenital methaemoglobinemia: cytochrome b(5) reductase deficiency. *Br J Haematol* 141(3):298-308. <http://doi.org/10.1111/j.1365-2141.2008.07017.x>.
- Perrone MG, Carbone C, Faedo D, et al. 2014. Exhaust emissions of polycyclic aromatic hydrocarbons, n-alkanes and phenols from vehicles coming within different European classes. *Atmos Environ* 82:391-400. <http://doi.org/10.1016/j.atmosenv.2013.10.040>.
- Pitter P. 1976. Determination of biological degradability of organic substances. *Water Res* 10(3):231-235. [http://doi.org/10.1016/0043-1354\(76\)90132-9](http://doi.org/10.1016/0043-1354(76)90132-9).
- Plasterer MR, Bradshaw WS, Booth GM, et al. 1985. Developmental toxicity of nine selected compounds following prenatal exposure in the mouse: naphthalene, p-nitrophenol, sodium selenite, dimethyl phthalate, ethylenethiourea, and four glycol ether derivatives. *J Toxicol Environ Health* 15(1):25-38. <http://doi.org/10.1080/15287398509530633>.
- Portier RJ. 1985. Comparison of environmental effect and biotransformation of toxicants on laboratory microcosm and field microbial communities. In: Boyle T, ed. *Validation and predictability of laboratory methods for assessing the fate effects of contaminants in aquatic ecosystems*. Philadelphia, PA: American Society for Testing and Materials, 14-30.
- Price DP. 2011. Methemoglobin inducers. In: Nelson LS, Lewin NA, Howland MA, et al., eds. *Goldfrank's toxicologic emergencies*. 9<sup>th</sup> ed. The McGraw-Hill Companies, 1698-1707.
- Probst GS, McMahon RE, Hill LE, et al. 1981. Chemically-induced unscheduled DNA synthesis in primary rat hepatocyte cultures: a comparison with bacterial mutagenicity using 218 compounds. *Environ Mutagen* 3(1):11-32. <http://doi.org/10.1002/em.2860030103>.
- Qiao GL, Chang SK, Brooks JD, et al. 2000. Dermatotoxicokinetic modeling of p-nitrophenol and its conjugation metabolite in swine following topical and intravenous administration. *Toxicol Sci* 54(2):284-294. <http://doi.org/10.1093/toxsci/54.2.284>.
- Rashid KA, Mumma RO. 1986. Screening pesticides for their ability to damage bacterial DNA. *J Environ Sci Health B* 21(4):319-334. <http://doi.org/10.1080/03601238609372527>.
- Reinke LA, Moyer MJ. 1985. p-Nitrophenol hydroxylation. A microsomal oxidation which is highly inducible by ethanol. *Drug Metab Dispos* 13(5):548-552.
- RePORTER. 2022. Nitrophenols. Research Portfolio Online Reporting Tools. National Institutes of Health. <https://reporter.nih.gov/>. October 28, 2022.
- Rippen G, Zietz E, Frank R, et al. 1987. Do airborne nitrophenols contribute to forest decline? *Environ Technol Lett* 8(1-12):475-482. <http://doi.org/10.1080/09593338709384508>.
- Robinson D, Smith JN, Williams RT. 1951a. Studies in detoxication. 39. Nitro compounds; (a) the metabolism of o-, m- and p-nitrophenols in the rabbit; (b) the glucuronides of the mononitrophenols and observations on the anomalous optical rotations of triacetyl beta-o-nitrophenyl glucuronide and its methyl ester. *Biochem J* 50(2):221-227. <http://doi.org/10.1042/bj0500221>.
- Robinson D, Smith JN, Williams RT. 1951b. 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):228-235. <http://doi.org/10.1042/bj0500228>.
- Roca M, Miralles-Marco A, Ferré J, et al. 2014. Biomonitoring exposure assessment to contemporary pesticides in a school children population of Spain. *Environ Res* 131:77-85. <http://doi.org/10.1016/j.envres.2014.02.009>.
- Rooney AA, Boyles AL, Wolfe MS, et al. 2014. Systematic review and evidence integration for literature-based environmental health science assessments. *Environ Health Perspect* 122(7):711-718. <http://doi.org/10.1289/ehp.1307972>.

## 8. REFERENCES

- Rott B, Viswanathan R, Freitag D, et al. 1982. Comparative study of the applicability of various tests for determining the degradability of environmental chemicals. *Chemosphere* 11:531-538.  
[http://doi.org/10.1016/0045-6535\(82\)90186-2.](http://doi.org/10.1016/0045-6535(82)90186-2) (German)
- Rubin HE, Alexander M. 1983. Effect of nutrients on the rates of mineralization of trace concentrations of phenol and p-nitrophenol. *Environ Sci Technol* 17(2):104-107.  
[http://doi.org/10.1021/es00108a008.](http://doi.org/10.1021/es00108a008)
- Rubin HE, Subba-Rao RV, Alexander M. 1982. Rates of mineralization of trace concentrations of aromatic compounds in lake water and sewage samples. *Appl Environ Microbiol* 43(5):1133-1138.  
[http://doi.org/10.1128/aem.43.5.1133-1138.1982.](http://doi.org/10.1128/aem.43.5.1133-1138.1982)
- Rubio MA, Lissi E, Herrera N, et al. 2012. Phenol and nitrophenols in the air and dew waters of Santiago de Chile. *Chemosphere* 86(10):1035-1039.  
[http://doi.org/10.1016/j.chemosphere.2011.11.046.](http://doi.org/10.1016/j.chemosphere.2011.11.046)
- Rubio MA, Bustamante P, Vásquez P Y. 2019. Atmospheric phenolic derivatives as tracers in an urban area. *J Chilean Chem Soc* 64(2):4407-4411. [http://doi.org/10.4067/s0717-97072019000204407.](http://doi.org/10.4067/s0717-97072019000204407)
- Rudel RA, Brody JG, Spengler JD, et al. 2001. Identification of selected hormonally active agents and animal mammary carcinogens in commercial and residential air and dust samples. *J Air Waste Manag Assoc* 51(4):499-513. [http://doi.org/10.1080/10473289.2001.10464292.](http://doi.org/10.1080/10473289.2001.10464292)
- Schechter AN. 2008. Hemoglobin research and the origins of molecular medicine. *Blood* 112(10):3927-3938. [http://doi.org/10.1182/blood-2008-04-078188.](http://doi.org/10.1182/blood-2008-04-078188)
- Schueuermann G, Klein W. 1988. Advances in biochemical prediction. *Chemosphere* 17:1551-1574.
- Schüürmann G, Ebert RU, Kühne R. 2006. Prediction of the sorption of organic compounds into soil organic matter from molecular structure. *Environ Sci Technol* 40(22):7005-7011.  
[http://doi.org/10.1021/es060152f.](http://doi.org/10.1021/es060152f)
- Scow KM, Simkins S, Alexander M. 1986. Kinetics of mineralization of organic compounds at low concentrations in soil. *Appl Environ Microbiol* 51(5):1028-1035.  
[http://doi.org/10.1128/aem.51.5.1028-1035.1986.](http://doi.org/10.1128/aem.51.5.1028-1035.1986)
- Scow KM, Schmidt SK, Alexander M. 1989. Kinetics of biodegradation of mixtures of substrates in soil. *Soil Biol Biochem* 21(5):703-708. [http://doi.org/10.1016/0038-0717\(89\)90067-9.](http://doi.org/10.1016/0038-0717(89)90067-9)
- Scully FE, Hoigné J. 1987. Rate constants for reactions of singlet oxygen with phenols and other compounds in water. *Chemosphere* 16(4):681-694. [http://doi.org/10.1016/0045-6535\(87\)90004-x.](http://doi.org/10.1016/0045-6535(87)90004-x)
- Shelton DR, Tiedje JM. 1984. General method for determining anaerobic biodegradation potential. *Appl Environ Microbiol* 47(4):850-857. [http://doi.org/10.1128/aem.47.4.850-857.1984.](http://doi.org/10.1128/aem.47.4.850-857.1984)
- Shimizu M, Yano E. 1986. Mutagenicity of mono-nitrobenzene derivatives in the Ames test and rec assay. *Mutat Res* 170(1-2):11-22. [http://doi.org/10.1016/0165-1218\(86\)90077-7.](http://doi.org/10.1016/0165-1218(86)90077-7)
- Siragusa GR, Delaune RD. 1986. Mineralization and sorption of p-nitrophenol in estuarine sediment. *Environ Toxicol Chem* 5(2):175-178. [http://doi.org/10.1002/etc.5620050208.](http://doi.org/10.1002/etc.5620050208)
- Sittig M. 1981. Nitrophenols. In: *Handbook of toxic and hazardous chemicals*. Park Ridge, NJ: Noyes Data Corporation, 332.
- Smith LW, Hall GT, Kennedy GL. 1988. Acute and repeated dose inhalation toxicity of para-nitrophenol sodium salt in rats. *Drug Chem Toxicol* 11(3):319-327.  
[http://doi.org/10.3109/01480548809017886.](http://doi.org/10.3109/01480548809017886)
- Snider EH, Manning FS. 1982. A survey of pollutant emission levels in wastewaters and residuals from the petroleum refining industry. *Environ Int* 7(4):237-258. [http://doi.org/10.1016/0160-4120\(82\)90114-3.](http://doi.org/10.1016/0160-4120(82)90114-3)
- Solomon GM, Hurley S, Carpenter C, et al. 2021. Fire and water: Assessing drinking water contamination after a major wildfire. *ACS ES T Water* 1(8):1878-1886.  
[http://doi.org/10.1021/acsestwater.1c00129.](http://doi.org/10.1021/acsestwater.1c00129)
- Spain JC, Van Veld PA. 1983. Adaptation of natural microbial communities to degradation of xenobiotic compounds: effects of concentration, exposure time, inoculum, and chemical structure. *Appl Environ Microbiol* 45(2):428-435. [http://doi.org/10.1128/aem.45.2.428-435.1983.](http://doi.org/10.1128/aem.45.2.428-435.1983)

## 8. REFERENCES

- Spain JC, Wyss O, Gibson DT. 1979. Enzymatic oxidation of p-nitrophenol. *Biochem Biophys Res Commun* 88(2):634-641. [http://doi.org/10.1016/0006-291x\(79\)92095-3](http://doi.org/10.1016/0006-291x(79)92095-3).
- Spain JC, Pritchard PH, Bourquin AW. 1980. Effects of adaptation on biodegradation rates in sediment/water cores from estuarine and freshwater environments. *Appl Environ Microbiol* 40(4):726-734. <http://doi.org/10.1128/aem.40.4.726-734.1980>.
- Spain JC, Van Veld PA, Monti CA, et al. 1984. Comparison of p-nitrophenol biodegradation in field and laboratory test systems. *Appl Environ Microbiol* 48(5):944-950. <http://doi.org/10.1128/aem.48.5.944-950.1984>.
- 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. <http://doi.org/10.1002/etc.5620040202>.
- Stone AT. 1987. Reductive dissolution of manganese(III/IV) oxides by substituted phenols. *Environ Sci Technol* 21(10):979-988. <http://doi.org/10.1021/es50001a011>.
- Stucke AG, Riess ML, Connolly LA. 2006. Hemoglobin M (Milwaukee) affects arterial oxygen saturation and makes pulse oximetry unreliable. *Anesthesiology* 104(4):887-888. <http://doi.org/10.1097/00000542-200604000-00036>.
- Stuehr DJ. 2004. Enzymes of the L-arginine to nitric oxide pathway. *J Nutr* 134(10 Suppl):2748S-2751S. <http://doi.org/10.1093/jn/134.10.2748S>.
- Suarez C, Louys F, Günther K, et al. 1970. OH-radical induced denitration of nitrophenols. *Tetrahedron Lett* 11(8):575-578. [http://doi.org/10.1016/s0040-4039\(01\)97773-1](http://doi.org/10.1016/s0040-4039(01)97773-1).
- Subba-Rao RV, Rubin HE, Alexander M. 1982. Kinetics and extent of mineralization of organic chemicals at trace levels in freshwater and sewage. *Appl Environ Microbiol* 43(5):1139-1150. <http://doi.org/10.1128/aem.43.5.1139-1150.1982>.
- Sudhakar B, Sethunathan N. 1978. Metabolism of nitrophenols in flooded soils. *J Environ Qual* 7(3):349-352. <http://doi.org/10.2134/jeq1978.00472425000700030011x>.
- Sudhakar B, Siddaramappa R, Sethunathan N. 1976. Metabolism of nitrophenols by bacteria isolated from parathion-amended flooded soil. *Antonie Van Leeuwenhoek* 42(4):461-470. <http://doi.org/10.1007/BF00410177>.
- Suzuki J, Koyama T, Suzuki S. 1983. Mutagenicities of mono-nitrobenzene derivatives in the presence of norharman. *Mutat Res* 120(2-3):105-110. [http://doi.org/10.1016/0165-7992\(83\)90150-1](http://doi.org/10.1016/0165-7992(83)90150-1).
- Swindoll CM, Aelion CM, Pfaender FK. 1988. Influence of inorganic and organic nutrients on aerobic biodegradation and on the adaptation response of subsurface microbial communities. *Appl Environ Microbiol* 54(1):212-217. <http://doi.org/10.1128/aem.54.1.212-217.1988>.
- Szybalski W. 1958. Special microbiological systems. II. Observations on chemical mutagenesis in microorganisms. *Ann N Y Acad Sci* 76(3):475-489. <http://doi.org/10.1111/j.1749-6632.1958.tb57106.x>.
- Tabak HH, Quave SA, Mashni CI, et al. 1981. Biodegradability studies with organic priority pollutant compounds. *J Water Pollut Control Fed* 53(10):1503-1518.
- Tang J, Song M, Watanabe G, et al. 2016. Effects of 4-nitrophenol on expression of the ER- $\alpha$  and AhR signaling pathway-associated genes in the small intestine of rats. *Environ Pollut* 216:27-37. <http://doi.org/10.1016/j.envpol.2016.05.040>.
- Toker I, Yesilaras M, Tur FC, et al. 2015. Methemoglobinemia caused by dapsone overdose: Which treatment is best? *Turk J Emerg Med* 15(4):182-184. <http://doi.org/10.1016/j.tjem.2014.09.002>.
- Tremp J, Mattrel P, Fingler S, et al. 1993. Phenols and nitrophenols as tropospheric pollutants: Emissions from automobile exhausts and phase transfer in the atmosphere. *Water Air Soil Pollut* 68(1-2):113-123. <http://doi.org/10.1007/bf00479396>.
- TRI21. 2022. TRI explorer: Providing access to EPA's toxics release inventory data. Washington, DC: Toxics Release Inventory. U.S. Environmental Protection Agency. <http://www.epa.gov/triexplorer/>. August 2, 2022.
- Tülp HC, Fenner K, Schwarzenbach RP, et al. 2009. pH-Dependent sorption of acidic organic chemicals to soil organic matter. *Environ Sci Technol* 43(24):9189-9195. <http://doi.org/10.1021/es902272j>.

## 8. REFERENCES

- U.S. Army. 1983. Phase 1. Dermal penetration and distribution of 14C-labeled paranitrophenol (PNP). Aberdeen Proving Ground, MD: U.S. Army. ADA134315. Study No. 75-51-0047-84. <https://apps.dtic.mil/sti/pdfs/ADA134315.pdf>. January 3, 2023.
- U.S. Army. 1985. Final phase effect of dermal applications of paranitrophenol on the reproductive functions of rats. Study no. 75-51-0047-85. September 1980 - March 1985. Aberdeen Proving Ground, MD: U.S. Army. ADA157120.
- USITC. 2022. Nitrophenols. Dataweb. U.S. International Trade Commission. <https://dataweb.usitc.gov/>. November 3, 2022.
- Vaishnav DD, Korthals ET. 1988. Comparison of chemical biodegradation rates in BOD dilution and natural waters. Bull Environ Contam Toxicol 41(2):291-298. <http://doi.org/10.1007/BF01705445>.
- Vernot EH, MacEwen JD, Haun CC, et al. 1977. Acute toxicity and skin corrosion data for some organic and inorganic compounds and aqueous solutions. Toxicol Appl Pharmacol 42:417-423. [http://doi.org/10.1016/0041-008X\(77\)90019-9](http://doi.org/10.1016/0041-008X(77)90019-9).
- Vershueren K. 1983. m-Nitrophenol, o-Nitrophenol, p-Nitrophenol. In: Handbook of environmental data on organic chemicals. 2<sup>nd</sup> ed. New York: Van Nostrand Reinhold Co., 917-920.
- Villanueva JR. 1961. Organic nitro compounds reduced by Nocardia V. Microbiol Espanola 14:157-162.
- Vione D, Maurino V, Minero C, et al. 2001. Phenol photonitration upon UV irradiation of nitrite in aqueous solution I: Effects of oxygen and 2-propanol. Chemosphere 45(6-7):893-902. [http://doi.org/10.1016/s0045-6535\(01\)00035-2](http://doi.org/10.1016/s0045-6535(01)00035-2).
- Wei J, Lu T, Dong F, et al. 2021. Gene expression profiles of two testicular somatic cell lines respond differently to 4-nitrophenol mediating vary reproductive toxicity. Toxicology 463:152991. <http://doi.org/10.1016/j.tox.2021.152991>.
- WHO. 2010. Guidelines for indoor air quality: Selected pollutants. World Health Organization. [http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0009/128169/e94535.pdf](http://www.euro.who.int/__data/assets/pdf_file/0009/128169/e94535.pdf). April 25, 2012.
- WHO. 2017. Guidelines for drinking-water quality. Fourth edition incorporating the first addendum. World Health Organization. <https://apps.who.int/iris/bitstream/handle/10665/254637/9789241549950-eng.pdf;jsessionid=8AD40533ABAFC37B8C6ABE4EFF2AC2F?sequence=1>. November 7, 2022.
- Wiggins BA, Alexander M. 1988. Role of chemical concentration and second carbon sources in acclimation of microbial communities for biodegradation. Appl Environ Microbiol 54(11):2803-2807. <http://doi.org/10.1128/aem.54.11.2803-2807.1988>.
- Wilderer P. 1981. A model river test to describe the various impacts of chemical substances on microbial biocommunities. AIChE Symp Ser 37:205-213.
- Williams RT. 1938. Studies in detoxication: The influence of (a) dose and (b) o-, m- and p-substitution on the sulphate detoxication of phenol in the rabbit. Biochem J 32(5):878-887. <http://doi.org/10.1042/bj0320878>.
- Wise CF, Hammel SC, Herkert NJ, et al. 2022. Comparative assessment of pesticide exposures in domestic dogs and their owners using silicone passive samplers and biomonitoring. Environ Sci Technol 56(2):1149-1161. <http://doi.org/10.1021/acs.est.1c06819>.
- WQP. 2022. Nitrophenols. Water quality portal. National Water Quality Monitoring Council. <https://www.waterqualitydata.us/portal/>. October 13, 2022.
- Wróbel K, Wróbel K, Madai Colunga Urbina E, et al. 2000. The determination of 3-nitrophenol and some other aromatic impurities in 4-nitrophenol by reversed phase HPLC with peak suppression diode array detection. J Pharm Biomed Anal 22(2):295-300. [http://doi.org/10.1016/s0731-7085\(99\)00249-6](http://doi.org/10.1016/s0731-7085(99)00249-6).
- Wu J, Kaufman RJ. 2006. From acute ER stress to physiological roles of the Unfolded Protein Response. Cell Death Differ 13(3):374-384. <http://doi.org/10.1038/sj.cdd.4401840>.
- Xu WF, Li YS, Dai PY, et al. 2016. Potential protective effect of arginine against 4-nitrophenol-induced ovarian damage in rats. J Toxicol Sci 41(3):371-381. <http://doi.org/10.2131/jts.41.371>.

## 8. REFERENCES

- Yalkowsky SH, He Y, Jain P. 2010. m-Nitrophenols. In: Handbook of aqueous solubility data. 2<sup>nd</sup> ed. Boca Raton, FL: CRC Press, 22, 229.
- Yoshida K, Shigeoka T, Yamauchi F. 1983. Non-steady-state equilibrium model for the preliminary prediction of the fate of chemicals in the environment. Ecotoxicol Environ Saf 7(2):179-190. [http://doi.org/10.1016/0147-6513\(83\)90064-7](http://doi.org/10.1016/0147-6513(83)90064-7).
- Young DR. 1978. Priority pollutants in municipal wastewaters. In: 1978 Annual report. South California Coastal Water Research Project, <https://www.sccwrp.org/publications/annual-reports/1978-annual-report/>. April 22, 2020.
- Zaidi BR, Murakami Y, Alexander M. 1988. Factors limiting success of inoculation to enhance biodegradation of low concentrations of organic chemicals. Environ Sci Technol 22(12):1419-1425. <http://doi.org/10.1021/es00177a005>.
- Zaidi BR, Murakami Y, Alexander M. 1989. Predation and inhibitors in lake water affect the success of inoculation to enhance biodegradation of organic chemicals. Environ Sci Technol 23(7):859-863. <http://doi.org/10.1021/es00065a016>.
- Zeyer J, Kearney PC. 1984. Degradation of o-nitrophenol and m-nitrophenol by a *Pseudomonas putida*. J Agric Food Chem 32(2):238-242. <http://doi.org/10.1021/jf00122a015>.
- Zhang Y, Piao Y, Li Y, et al. 2013. 4-Nitrophenol induces Leydig cells hyperplasia, which may contribute to the differential modulation of the androgen receptor and estrogen receptor- $\alpha$  and - $\beta$  expression in male rat testes. Toxicol Lett 223(2):228-235. <http://doi.org/10.1016/j.toxlet.2013.09.011>.
- Zhang Y, Song M, Rui X, et al. 2015. Supplemental dietary phytosterin protects against 4-nitrophenol-induced oxidative stress and apoptosis in rat testes. Toxicol Rep 2:664-676. <http://doi.org/10.1016/j.toxrep.2015.04.007>.
- Zhang Y, Cao Y, Wang F, et al. 2016. 4-Nitrophenol induces activation of Nrf2 antioxidant pathway and apoptosis of the germ cells in rat testes. Environ Sci Pollut Res Int 23(13):13035-13046. <http://doi.org/10.1007/s11356-016-6470-2>.
- Zhang H, Taya K, Nagaoka K, et al. 2017. 4-Nitrophenol (PNP) inhibits the expression of estrogen receptor  $\beta$  and disrupts steroidogenesis during the ovarian development in female rats. Environ Pollut 229:1-9. <http://doi.org/10.1016/j.envpol.2017.04.088>.