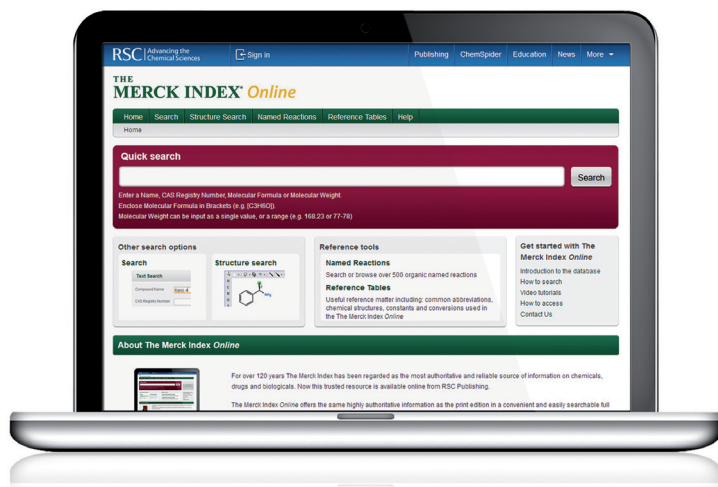


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# Sample record

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### Monograph Details

Monograph ID: MONO150000047  
Title: Acetaminophen  
CAS Registry Number: 103-90-2  
CAS Name: N-(4-Hydroxyphenyl)acetamide  
Additional Names: 4'-hydroxyacetanilide, p-hydroxyacetanilide, p-acetamidophenol, p-acetaminophenol, p-acetylamino-phenol, N-acetyl-p-aminophenol, paracetamol  
Trademark Names: Acamol (Volta), Alpiny (SS Pharm.), Alvedon (AstraZeneca), Anhiba (Abbott), Ben-u-ron (Novartis), Calpol (Pfizer), Calradol (Bayer), Captin (Krewel), Dafalgan (BMS), Datrii (BMS), Diprox (Gramon), Disprol (Reckitt Benckiser), Doliprane (Sanofi-Aventis), Dolitabs (Sanofi-Aventis), Dolviran (Bayer), Efferalgan (BMS), Efferalganodis (UPSA), Enefla (Dolorgiet), Expandox (Expanspharm), Fensum (Merkle), Geluprane (Sanofi-Aventis), Hedex (GSK), Malex (Ecosol), Mejrallito (GSK), Panadol (GSK), Panamax (Sanofi-Aventis), Panodil (GSK), Pasolind N (Stada), Perfalgan (BMS), Sanipirina (Bayer), Sedalito (Merck KGaA), Tempra (BMS), Tylenol (McNeil)

Molecular Formula: C<sub>8</sub>H<sub>9</sub>NO<sub>2</sub>  
Molecular Weight: 151.17  
Percent Composition: C 63.56%, H 6.00%, N 9.27%, O 21.17%

**Properties**

Large monoclinic prisms from water, mp 169-170.5°C, d<sub>4</sub><sup>21</sup> 1.293. uv max (ethanol): 250 nm (ε 13800). Freely sol in alcohol. Sol in methanol, ethanol, dimethylformamide, ethylene dichloride, acetone, ethyl acetate, boiling water, 1N sodium hydroxide. Slightly sol in ether. Very slightly sol in cold water. Practically insol in petr ether, pentane, benzene. LD<sub>50</sub> in mice (mg/kg): 338 orally, 500 i.p. See: G. A. Stramer et al., *Toxicol. Appl. Pharmacol.* **19**, 20 (1971) 10.1016/0041-008X(71)90185-25570565; D. C. Dahlin, S. D. Nelson, *J. Med. Chem.* **25**, 885 (1982) 10.1021/jm00350a0017120276.

**Use**

Manuf azo dyes, photographic chemicals.

**References**

Synthetic non-opiate analgesic. Prep'n from p-nitrophenol. Morse, *Ber.* **11**, 232 (1878); Tingle, Williams, *Am. Chem. J.* **37**, 63 (1907); from p-aminophenol. Lumière et al., *Bull. Soc. Chim. Fr.* [3] **33**, 785 (1905); Fierz-David, Kuster, *Helv. Chim. Acta* **22**, 49 (1939); Wilbert, De Angelis, US 2998450 (1961 to Warner-Lambert); Bergmann, DE 453577; *Chem. Zentrbl.* **1928**, I, 2663; *Frdl.* **16**, 238; from p-hydroxyacetophenone hydrazone: Pearson et al., *J. Am. Chem. Soc.* **76**, 607 (1953). Evaluation of renal effects: D. P. Sandler et al., *N. Engl. J. Med.* **320**, 1238 (1989)2651928; *Clin. Rheum. Arthritis*: A. R. Temple et al., *Clin. Ther.* **28**, 222 (2006) 10.1016/j.clinthera.2006.02.0041667065. Molecular toxicology: P. D. Josephy, *Drug Metab. Rev.* **37**, 581 (2005) 10.1080/0360253050020520016393886. Comprehensive description: J. E. Fairbrother, *Anal. Profiles Drug Subs.* **3**, 1-109 (1974). Review of pharmacology: B. Ameer, D. J. Greenblatt, *Ann. Intern. Med.* **87**, 202-209 (1977)329728. Review of mechanism of hepatotoxicity: L. P. James et al., *Drug Metab. Dispos.* **31**, 1499-1506 (2003) 10.1124/dmd.31.12.149914625346; of acetaminophen-induced acute liver failure: A. M. Larson et al., *Hepatology* **42**, 1364-1372 (2005) 10.1002/hep.2094816317692.

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