

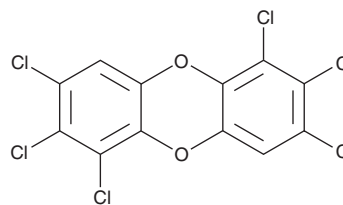
PRODUCT INFORMATION



1,2,3,6,7,8-Hexachlorodibenzo-*p*-dioxin

Item No. 38595

CAS Registry No.: 57653-85-7
Formal Name: 1,2,3,6,7,8-hexachloro-dibenzo[b,e][1,4]dioxin
Synonyms: 1,2,3,6,7,8-HxCDD, PCDD 67
MF: C₁₂H₂Cl₆O₂
FW: 390.9
Purity: ≥98%
Supplied as: A solution in n-nonane:toluene (8:2)
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

1,2,3,6,7,8-Hexachlorodibenzo-*p*-dioxin is a polychlorinated dibenzodioxin (PCDD).¹ It is an agonist of the aryl hydrocarbon receptor (AhR; EC₅₀s = 5.4 and 9.3 nM at 4 and 8 h, respectively, in a reporter assay). 1,2,3,6,7,8-Hexachlorodibenzo-*p*-dioxin (0.5 and 2 µg/kg) decreases the production of antibodies against sheep red blood cells in mice.² It has been found in animal feed and in the air near municipal waste incinerators.^{3,4}

References

1. Xu, T., Young, A., Marr, E., *et al.* A rapid and reagent-free bioassay for the detection of dioxin-like compounds and other aryl hydrocarbon receptor (AhR) agonists using autoluminescent yeast. *Anal. Bioanal. Chem.* **410**(4), 1247-1256 (2018).
2. Holsapple, M.P., McNerney, P.J., Barnes, D.W., *et al.* Suppression of humoral antibody production by exposure to 1,2,3,6,7,8-hexachlorodibenzo-*p*-dioxin. *J. Pharmacol. Exp. Ther.* **231**(3), 518-526 (1984).
3. Pajurek, M., Warenik-Bany, M., and Mikolajczyk, S. Feed as a source of dioxins and PCBs. *Chemosphere* **308**(Pt 1), 136243 (2022).
4. Hu, S.-W., ChangChien, G.-P., and Chan, C.-C. PCDD/Fs levels in indoor environments and blood of workers of three municipal waste incinerators in Taiwan. *Chemosphere* **55**(4), 611-620 (2004).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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