

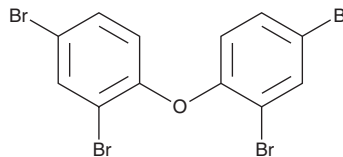
PRODUCT INFORMATION



BDE 47

Item No. 39232

CAS Registry No.: 5436-43-1
Formal Name: 2,4-dibromo-1-(2,4-dibromophenoxy)-benzene
Synonyms: NSC 21724, PBDE 47, 2,2',4,4'-Tetrabromodiphenyl ether
MF: C₁₂H₆Br₄O
FW: 485.8
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

BDE 47 is supplied as a solid. A stock solution may be made by dissolving the BDE 47 in the solvent of choice, which should be purged with an inert gas. BDE 47 is soluble in methanol.

Description

BDE 47 is a polybrominated diphenyl ether (PBDE).¹ It increases liver and serum triglyceride levels in newborn pups when administered to pregnant mouse dams at a dose of 1 mg/kg per day.¹ BDE 47 (20 μM) reduces the average speed and number of spontaneous movements in zebrafish.² It decreases dorsal and ventral axon lengths and induces apoptosis in axial muscles in zebrafish at the same concentration. It has been found as a contaminant in human breast milk and livestock feed.^{3,4}

References

1. Khalil, A., Cevik, S.E., Hung, S., *et al.* Developmental exposure to 2,2',4,4'-tetrabromodiphenyl ether permanently alters blood-liver balance of lipids in male mice. *Frontiers in Endocrinology* **9(548)**, (2018).
2. Chen, X., Huang, C., Wang, X., *et al.* BDE-47 disrupts axonal growth and motor behavior in developing zebrafish. *Aquat. Toxicol.* **120-121**, 35-44 (2012).
3. Thomsen, C., Haug, L.S., Stigum, H., *et al.* Changes in concentrations of perfluorinated compounds, polybrominated diphenyl ethers, and polychlorinated biphenyls in Norwegian breast-milk during twelve months of lactation. *Environ. Sci. Technol.* **44(24)**, 9550-9556 (2010).
4. Chang, C.-J., Terrell, M.L., Marcus, M., *et al.* Serum concentrations of polybrominated biphenyls (PBBs), polychlorinated biphenyls (PCBs) and polybrominated diphenyl ethers (PBDEs) in the Michigan PBB Registry 40 years after the PBB contamination incident. *Environ. Int.* **137**, 105526 (2020).

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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