

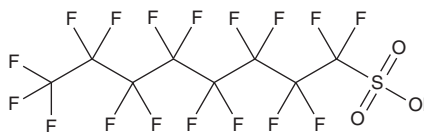
PRODUCT INFORMATION



Perfluorooctanesulfonic Acid

Item No. 37233

CAS Registry No.: 1763-23-1
Formal Name: 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptafluorooctanesulfonic acid
Synonyms: Heptafluorooctanesulfonic Acid, Perfluorooctane sulfonate, Perfluorooctylsulfonic Acid, PFOS
MF: $C_8H_7F_{17}O_3S$
FW: 500.1
Purity: ≥95% (mixture of isomers)
Supplied as: A 50 mg/ml solution in ethanol
Storage: -20°C
Stability: ≥4 years



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

Description

Perfluorooctanesulfonic acid (PFOS) is a perfluoroalkyl substance (PFAS).¹ It decreases peroxisome proliferator-activated receptor γ (PPAR γ) transactivation in a reporter assay and induces apoptosis in NRK-52E rat renal proximal tubular epithelial cells, effects that can be reversed by the PPAR γ agonist rosiglitazone (Item Nos. 71740 | 11884 | 71742), when used at a concentration of 50 nM. PFOS (20 mg/L) increases malondialdehyde (MDA) levels and decreases glutathione (GSH) levels in zebrafish larvae.² It decreases body weight and induces hepatomegaly, renal hypertrophy, neoplastic growth in the gonads, thickening of pulmonary epithelial walls, and focal hyperplasia of cerebral gliocytes in rats when administered at a dose of 20 mg/kg.³ Maternal serum exposure to PFOS is positively associated with gestational diabetes, and umbilical cord serum levels are negatively associated with infant birth weight and head circumference.^{4,5} It has been found in lake trout (*S. namaycush*), marine mammals, and urban watersheds.⁶⁻⁸

References

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5. Apelberg, B.J., Witter, F.R., Herbstman, J.B., *et al.* Cord serum concentrations of perfluorooctane sulfonate (PFOS) and perfluorooctanoate (PFOA) in relation to weight and size at birth. *Environ. Health Perspect.* **115**(11), 1670-1676 (2007).
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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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM