

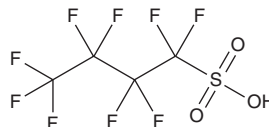
PRODUCT INFORMATION



Perfluorobutanesulfonic Acid

Item No. 37243

CAS Registry No.: 375-73-5
Formal Name: 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonic acid
Synonyms: Eftop FBSA, Nonafluoro-1-butanesulfonic Acid, Nonafluorobutane-1-sulfonic Acid, Nonafluorobutanesulfonic Acid, PFBS
MF: $C_4HF_9O_3S$
FW: 300.1
Purity: $\geq 80\%$
Supplied as: A neat oil
Storage: $-20^\circ C$
Stability: ≥ 4 years



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

Laboratory Procedures

Perfluorobutanesulfonic acid is supplied as a neat oil. A stock solution may be made by dissolving the perfluorobutanesulfonic acid in the solvent of choice, which should be purged with an inert gas. Perfluorobutanesulfonic acid is soluble in chloroform and methanol.

Description

Perfluorobutanesulfonic acid (PFBS) is a perfluoroalkyl substance (PFAS).^{1,2} It enhances oleic acid- and palmitic acid-induced lipid accumulation, an effect that can be reversed by the peroxisome proliferator-activated receptor γ (PPAR γ) antagonist GW 9662 (Item No. 70785), and reactive oxygen species (ROS) production in HepG2 cells in an *in vitro* model of steatosis when used at a concentration of 200 μM .³ Prenatal exposure to PFBS is positively correlated with preterm birth.¹ PFBS has been found as a contaminant in wastewater.²

References

1. Liao, Q., Tang, P., Song, Y., *et al.* Association of single and multiple prefluoroalkyl substances exposure with preterm birth: Results from a Chinese birth cohort study. *Chemosphere* **307**(Pt 1), 135741 (2022).
2. Kim, J., Xin, X., Mamo, B.T., *et al.* Occurrence and fate of ultrashort-chain and other per- and polyfluoroalkyl substances (PFAS) in wastewater treatment plants. *ACS EST Water* **2**(8), 1380–1390 (2022).
3. Qi, W., Clark, J.M., Timme-Laragy, A.R., *et al.* Perfluorobutanesulfonic acid (PFBS) induces fat accumulation in HepG2 human hepatoma. *Toxicol. Environ. Chem.* **102**(10), 585-606 (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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