

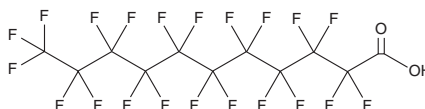
PRODUCT INFORMATION



Perfluoroundecanoic Acid

Item No. 37257

CAS Registry No.: 2058-94-8
Formal Name: 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heneicosafuoro-undecanoic acid
Synonyms: C11-PFCA, Henicosafuoroundecanoic Acid, PFUnDA
MF: $C_{11}HF_{21}O_2$
FW: 564.1
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

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

Description

Perfluoroundecanoic acid is a perfluoroalkyl substance (PFAS).¹ Embryo-larval exposure of perfluoroundecanoic acid decreases body length and eye size and increases yolk sac size in zebrafish when used at a concentration of 0.3 mg/L. Perfluoroundecanoic acid (1 mg/kg) decreases body and testicular weights and serum testosterone levels and increases serum levels of luteinizing hormone (LH) and follicle-stimulating hormone (FSH) in male mice.² It also increases testicular malondialdehyde (MDA) levels and superoxide dismutase (SOD) and catalase activities in the same mice. Maternal serum levels of perfluoroundecanoic acid are positively associated with the risk of gestational diabetes.³ It has been found in surface freshwater foams and shellfish.^{4,5}

References

1. Kim, J., Lee, G., Lee, Y.-M., *et al.* Thyroid disrupting effects of perfluoroundecanoic acid and perfluorotridecanoic acid in zebrafish (*Danio rerio*) and rat pituitary (GH3) cell line. *Chemosphere* **262**, 128012 (2021).
2. Ogunsuyi, O.M., Fasakin, P.T., Ajibiye, O.P., *et al.* Perfluoroundecanoic acid induces DNA damage, reproductive and pathophysiological dysfunctions via oxidative stress in male Swiss mice. *Chemosphere* **338**, 139491 (2023).
3. Xu, C., Zhang, L., Zhou, Q., *et al.* Exposure to per- and polyfluoroalkyl substances as a risk factor for gestational diabetes mellitus through interference with glucose homeostasis. *Sci. Total Environ.* **838**(Pt 4), 156561 (2022).
4. Schwichtenberg, T., Bogdan, D., Carignan, C.C., *et al.* PFAS and dissolved organic carbon enrichment in surface water foams on a northern U.S. freshwater lake. *Environ. Sci. Technol.* **54**(22), 14455-14464 (2020).
5. Catherine, M., Nadège, B., Charles, P., *et al.* Perfluoroalkyl substances (PFASs) in the marine environment: Spatial distribution and temporal profile shifts in shellfish from French coasts. *Chemosphere* **228**, (2019).

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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