PRODUCT INFORMATION



Perfluorononanoic Acid

Item No. 37250

CAS Registry No.:	375-95-1	
Formal Name:	2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluoro-	
Synonyms:	nonanoic acid HDFNA, Heptadecafluorononanoic Acid, Perfluoropelargonic Acid, PFNA	$ \begin{array}{cccc} F & F & F & F & F & F \\ F & & & & & & &$
MF:	C ₉ HF ₁₇ O ₂	F OH
FW:	464.1	
Purity:	≥90%	FFFFFFF
Supplied as:	A low-melting 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

Perfluorononanoic acid (PFNA) is supplied as a low-melting solid. A stock solution may be made by dissolving the PFNA in the solvent of choice, which should be purged with an inert gas. PFNA is soluble in the organic solvent methanol.

Description

PFNA is a perfluoroalkyl substance (PFAS).¹ It increases serum glucose and hepatic glycogen levels, as well as increases hepatic hydrogen peroxide and malondialdehyde (MDA) levels, in rats when administered at a dose of 5 mg/kg per day. PFNA induces spontaneous abortion in pregnant mice when administered at a dose of 10 mg/kg per day and leads to death of pups within 10 days when administered to dams at a dose of 5 mg/kg per day on gestational days 1 through $17.^2$ It has been found in bottled water, watersheds, and marine mammals.3-5

References

- 1. Fang, X., Gao, G., Xue, H., et al. Exposure of perfluorononanoic acid suppresses the hepatic insulin signal pathway and increases serum glucose in rats. Toxicology 294(2-3), 109-115 (2012).
- 2. Das, K.P., Grey, B.E., Rosen, M.B., et al. Developmental toxicity of perfluorononanoic acid in mice. Reprod. Toxicol. 51, 133-144 (2015).
- Chow, S.J., Ojeda, N., Jacangelo, J.G., et al. Detection of ultrashort-chain and other per- and polyfluoroalkyl 3 substances (PFAS) in U.S. bottled water. Water Res. 201, 117292 (2021).
- Pétré, M.-A., Salk, K.R., Stapleton, H.M., et al. Per- and polyfluoroalkyl substances (PFAS) in river 4. discharge: Modeling loads upstream and downstream of a PFAS manufacturing plant in the Cape Fear watershed, North Carolina. Sci. Total Environ. 831, 154763 (2022).
- 5. Rotander, A., Kärrman, A., van Bavel, B., et al. Increasing levels of long-chain perfluorocarboxylic acids (PFCAs) in Arctic and North Atlantic marine mammals, 1984-2009. Chemosphere 86(3), 278-285 (2012).

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

SAFFTY 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.

WARRANTY AND LIMITATION OF REMEDY

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