PRODUCT INFORMATION



Perfluorodecanoic Acid

Item No. 37244

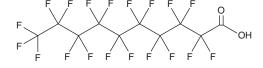
CAS Registry No.: 335-76-2

2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Formal Name:

nonadecafluoro-decanoic acid

Synonyms: Nonadecafluorodecanoic Acid, PFDA

MF: $C_{10}HF_{19}O_{2}$ FW: 514.1 ≥80% **Purity:** 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

Perfluorodecanoic acid is supplied as a solid. A stock solution may be made by dissolving the perfluorodecanoic acid in the solvent of choice, which should be purged with an inert gas. Perfluorodecanoic acid is soluble in organic solvents such as ethanol and dimethyl formamide. The solubility of perfluorodecanoic acid in these solvents is approximately 2 and 1 mg/ml, respectively.

Description

Perfluorodecanoic acid is a perfluoroalkyl substance (PFAS).¹ Chronic administration of perfluorodecanoic acid (25 mg/kg per day) induces weight loss and increases liver weight and lipid content in mice.² Perfluorodecanoic acid (25 mg/kg per day) reduces mRNA expression of the genes encoding IL-1β, IL-18, and cellular inhibitor of apoptosis 2 (cIAP2), as well as caspase-1, -3, and -7 in mouse liver. It has been found in marine life and as a contaminant in surface water. $^{1.3}$ Formulations containing perfluorodecanoic acid have been used commercially as wetting agents and flame retardants.

References

- 1. Li, Q., Wang, P., Wang, C., et al. A novel procedure for predicting chronic toxicities and ecological risks of perfluorinated compounds in aquatic environment. Environ. Res. 215(Pt 1), 114132 (2022).
- 2. Li, K., Zhao, Q., Fan, Z., et al. The toxicity of perfuorodecanoic acid is mainly manifested as a defected immune function. Mol. Biol. Rep. 49, 4365-4376 (2022).
- Vi, P.T., Ngoc, N.T., Quang, P.D., et al. Perfluoroalkyl substances in freshwater and marine fish from northern Vietnam: Accumulation levels, profiles, and implications for human consumption. Mar. Pollut. Bull. 182, 113995 (2022).

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

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