## **Product** Data Sheet

## Oxyfluorfen-d<sub>5</sub>

Cat. No.: HY-W725473 
CAS No.: 2140327-69-9 
Molecular Formula:  $C_{15}H_6D_5ClF_3NO_4$ 

Molecular Weight: 366.73

Target: Isotope-Labeled Compounds

Pathway: Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	Oxyfluorfen- $d_5$ is deuterated labeled Oxyfluorfen (HY-119176) Oxyfluorfen is a pre- and post-emergence diphenyl ether herbicide to control annual broad-leaved and grass weeds. Oxyfluorfen is a protoporphyrinogen oxidase inhibitor and inhibits photosynthesis by blocking chlorophyll synthesis.
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

[2]. E Warabi, et al. Resistance of a Soybean Cell Line to Oxyfluorfen by Overproduction of Mitochondrial Protoporphyrinogen Oxidase. Pest Manag Sci. 2001 Aug;57(8):743-8.

[3]. Chi Wu, et al. Sorption, Degradation and Bioavailability of Oxyfluorfen in Biochar-Amended Soils. Sci Total Environ. 2019 Mar 25;658:87-94.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA