MCE MedChemExpress

Product Data Sheet

Dimethyl phthalate (Ring-d4)

Cat. No.: HY-N7106S CAS No.: 93951-89-4 Molecular Formula: $C_{10}H_6D_4O_4$ Molecular Weight: 198.21

Target: Isotope-Labeled Compounds

Pathway: Others

Storage: Pure form -20°C 3 years

4°C 2 years

In solvent -80°C 6 months

-20°C 1 month

$$\begin{array}{c} D & O \\ O & O \\ O & O \end{array}$$

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (504.52 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	5.0452 mL	25.2258 mL	50.4515 mL
	5 mM	1.0090 mL	5.0452 mL	10.0903 mL
	10 mM	0.5045 mL	2.5226 mL	5.0452 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Dimethyl phthalate (Ring-d₄) is the deuterium labeled Dimethyl phthalate. Dimethyl phthalate, a known endocrine disruptor

and one of the phthalate esters (PAEs), is a ubiquitous pollutant. Dimethyl phthalate is commonly used as a plasticizer to

impart flexibility to rigid polyvinylchloride (PVC) resins [1].

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 $\[1\]$.

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]. Wang ZG, et al. Impacts of c	dimethyl phthalate on the bacterial community and functions in black soils. Front Microbiol. 2015 May 5;6:405.	
	Caution: Product has not been fully validated for medical applications. For research use only.	
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Page 2 of 2 www.MedChemExpress.com