Product Data Sheet

Methacrylic anhydride

Cat. No.: HY-W017330 CAS No.: 760-93-0 Molecular Formula: C₈H₁₀O₃ Molecular Weight: 154.17

Target: **Biochemical Assay Reagents**

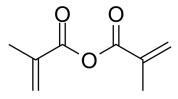
Pathway: Others

Storage: Pure form -20°C 3 years

2 years

In solvent -80°C 6 months

> -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (648.63 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	6.4863 mL	32.4317 mL	64.8635 mL
	5 mM	1.2973 mL	6.4863 mL	12.9727 mL
	10 mM	0.6486 mL	3.2432 mL	6.4863 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (16.22 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (16.22 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (16.22 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Methacrylic anhydride is a typical polymerizable 1,6-diolefin. Methacrylic anhydride can form a soluble csyclopolymer by free-radical initiation. Methacrylic anhydride can spontaneously polymerize through the vinyl group and justifies the use of 2-6-di-tert-butyl4-methylphenol as an inhibitor^{[1][2]}.

CUSTOMER VALIDATION

• Int J Mol Sci. 2023 Aug 25, 24(17), 13210.

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REFERENCES

[1]. Jesse C. H. Hwa, et al. Copolymerization of methacrylic anhydride with vinyl monomers. Journal of Polymer Science. November 1961, 55(161):197-213.

[2]. F. Becquart, et al. Functionalization of a poly(vinyl alcohol) in the solid state with a swelling agent by methacrylic anhydride. Polymer Chemistry. 1 April 2004, 42(7):1618-1629.

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

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